REPORT RESUMES

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DELINQUENCY PRONE YOUTH--LONGITUDINAL AND PREVENTIVE RESEARCH, EAU CLAIRE COUNTY YOUTH STUDY, PHASE III, 1965-68.

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A FIVE-YEAR LONGITUDINAL STUDY WAS CONDUCTED OF 1550 CHILDREN, 384 OF WHOM WERE INTENSIVELY STUDIED AFTER BEING IDENTIFIED BY THEIR TEACHERS AS DEMONSTRATING SOCIALLY APPROVED OR SOCIALLY DISAPPROVED BEHAVIOR. AFTER 5 YEARS, THE SOCIALLY DISRUPTIVE GROUP OF 192 STUDENTS WAS LOWER IN ACADEMIC ACHIEVEMENT AND SOCIAL ADJUSTMENT THAN THEIR APPROVED COUNTERPARTS. THEY CONTINUED TO DISPLAY SOCIALLY DISAPPROVED CLASSROOM BEHAVIOR AND WERE IN MORE FREQUENT CONTACT WITH LAW ENFORCEMENT AGENCIES. IT WAS CONCLUDED THAT (1) TEACHER DISAPPROVAL, POOR SELF CONCEPT, AND FAILURE TO GAIN APPROVAL SCHOLASTICALLY CONTRIBUTED SIGNIFICANTLY TO THE REGRESSION OF THE CHILD THROUGH UNDERACHIEVEMENT, SCHOOL DROPOUT, DELINQUENCY, AND EVENTUAL OVERT CRIMINALITY, (2) THE TEACHER MUST MAKE CAREFUL IDENTIFICATION OF CHILDREN EXHIBITING AGGRESSIVE BEHAVIOR AND ATTEMPT TO DELINEATE ITS EXACT CAUSE, AND (3) CURRICULAR INNOVATION CAN CONTRIBUTE MARKEDLY TO A DECREASED SCHOOL DROPOUT RATE, BUT MUCH RESEARCH IS NEEDED ON NEW METHODS OF MOTIVATING AND INSTRUCTING THE SOCIALLY DISRUPTIVE STUDENT. RELATED DOCUMENTS ARE RC 000 405, RC 000 406, AND ED 014 335. (DA)

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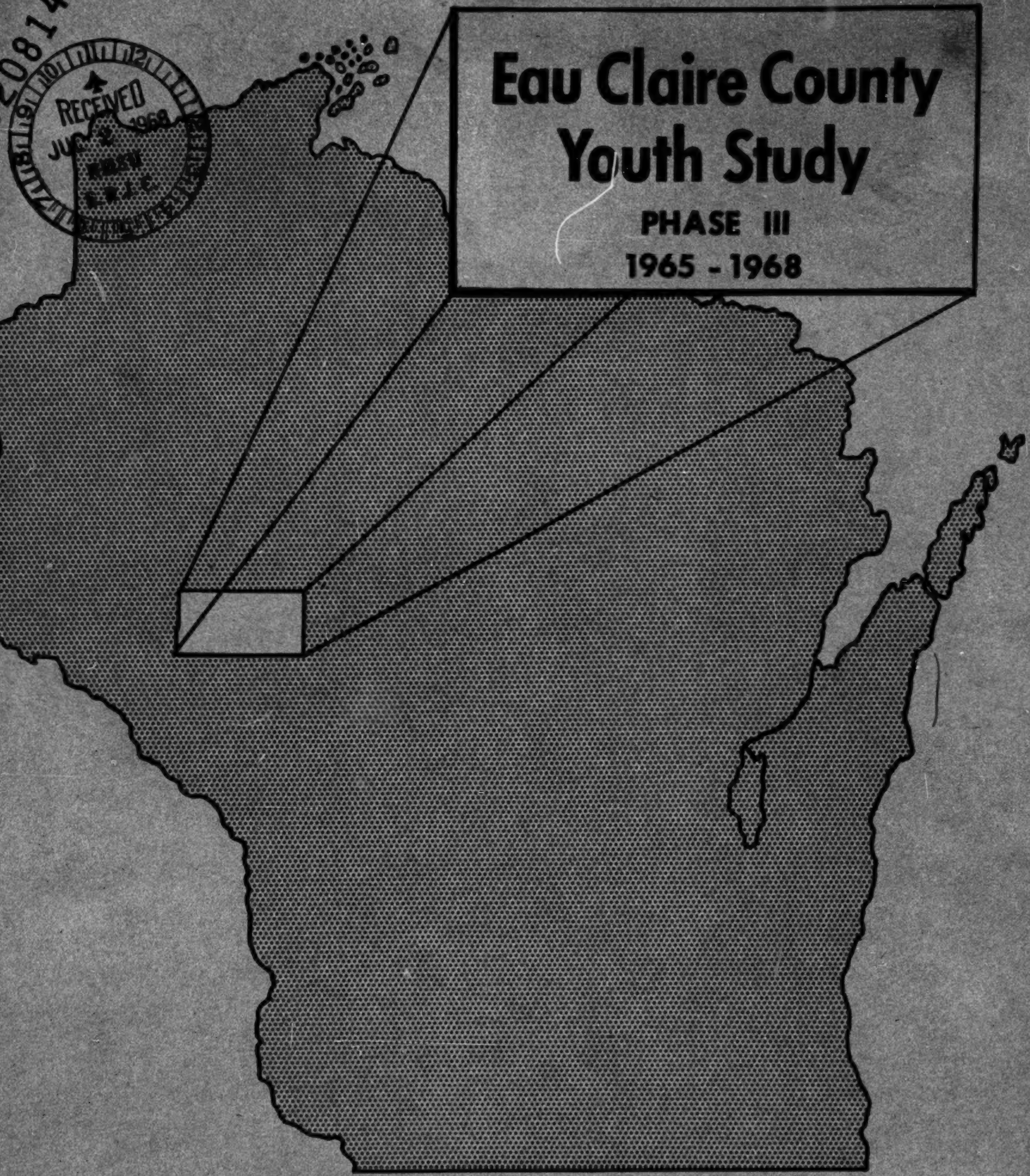

Eau Claire County Youth Study

PHASE III

1965 - 1968

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Delinquency Prone Youth: Longitudinal and Preventive Research

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April 30, 1968

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CONTENTS

		Page
	Acknowledgments	iii
	Cooperating Institutions and Advisory Committee	iv
	Project Staff	v
	Publications and Presentations	vii
	List of Tables	xii
Chapter 1.	The Eau Claire County Youth Study, Phases I and II Overview, and Introduction to Phase III	1
Chapter 2.	Longitudinal Analyses of the Relationship Between Classroom Behavior and School Achievement	13
Chapter 3.	Adjustment, Behavior Traits, and Contacts with Law Enforcement Agencies of Socially Approved and Disapproved Youth	49
Chapter 4.	Remedial Reading-Preventive Program	83
Chapter 5.	Summary and Conclusion	171

Appendix

A.	Behavior Rating Form	183
B.	Intelligence Test and Reading Achievement Data Form	184
C.	Letters to Parents	185
D.	Tutor-Counselor Application	187
E.	Sociometrics - Party and Program	188
F.	Tutored Reading Evaluation Forms	192

LIST OF TABLES

Table Page

2.1 Analyses of Variance and Covariance for Teacher Grades of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Had Been Studied Intensively - (Intensives) 39

2.2 Analyses of Variance for Teacher Grades of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior but Who Had Not Been Studied Intensively - (Nominees) 40

2.3 Means for Teacher Grades of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior 41

2.4 Analyses of Variance and Covariance for STEP Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Had Been Studied Intensively - (Intensives) 42

2.5 Analyses of Variance for STEP Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Were Not Studied Intensively - (Nominees) 43

2.6 Means for STEP Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior 44

2.7 Analyses of Variance and Covariance for Rank in Graduating Class of Youngsters Who Were First Identified in Grade Nine as Displaying Approved or Disapproved Behavior 45

2.8 Means for Rank in Graduating Class of Youngsters Who Were First Identified in Grade Nine as Displaying Approved or Disapproved Behavior 46

2.9 Analyses of Variance and Means for Teacher Grades, STEP Scores, and Rank in Graduating Class for High and Low Glueck Scale Scorers 47

2.10 Analyses of Variance and Means for Teacher Grades, STEP Scores, and Rank in Graduating Class for High and Low KD Scale Scorers 48

3.1 Analyses of Variance for Social Adjustment Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Were Studied Intensively - (Intensives) 73

LIST OF TABLES (Continued)

Table Page

3.2 Analyses of Variance for Social Adjustment Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior But Who Were Not Studied Intensively - (Nominees) 74

3.3 Means for Social Adjustment Scores for Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior 75

3.4 Analyses of Variance and Means for Social Adjustment Scores of Boys and Girls Who Were High or Low in Delinquency Proneness According to the Glueck Scales 76

3.5 Analyses of Variance and Means for Social Adjustment Scores of Boys and Girls Who Were High or Low in Delinquency Proneness According to the Kvaraceus Delinquency Proneness Scale 77

3.6 Analyses of Behavior Problems of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior 78

3.7 Analyses of Police and Sheriff Contacts and Dropping Out of School of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Were Studied Intensively - (Intensives) 79

3.8 Analyses of Police and Sheriff Contacts and Dropping Out of School of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Were Not Studied Intensively - (Nominees) 80

3.9 Chi-Square Analyses of Police and Sheriff Contacts Through June, 1967, of Youngsters Who Were High and Low in Delinquency Proneness When Rated With Glueck Scales in 1961 or 1962 81

3.10 Chi-Square Analyses of Police and Sheriff Contacts Through June, 1967, of Youngsters Who Were High and Low in Delinquency Proneness According to Their Scores on the KD Proneness Scale 82

4.1 Summary of Changes for Reading Achievement, Adjustment, and Behavior Measures 166

4.2 Means and Standard Deviations of Pretest, Post-test, and Change Scores for the Experimental Group and the Control Group on Reading Achievement, Adjustment, and Behavior Measures; Means and Standard Deviations for the Experimental Group and the Control Group on Wechsler Intelligence Scale for Children Full Scale Scores 167

Chapter 1

The Eau Claire County Youth Study, Phases I and II Overview, and Introduction to Phase III

Persistent classroom misbehavior constitutes a serious problem for the student, for his classmates, for his teacher, and ultimately for the community as a whole. Chronic misconduct appears to be essentially aggressive in character since it involves defiance, destructiveness, rule breaking, class disruption, cruelty, and fighting. Efficient learning in the classroom becomes virtually impossible when the teacher and students are frequently diverted from the learning task by aggressively troublesome students.

Beyond his immediate impact, the aggressive child may exert more lasting harmful effects upon the climate of the classroom. Other children may imitate his misbehavior, thus reducing still further the opportunities for learning. The teacher may become increasingly watchful and decreasingly instructive. Prolonged contact with problems of this nature may also engender emotional disturbances in the teacher. In a very real sense, everyone in the classroom is influenced to some degree by the aggressive child.

But in addition and beyond the confines of the school classroom, aggression appears to be related to the problem of school dropout and juvenile delinquency. Thus, society at large also becomes a victim. Because of its wide range of influence, persistent classroom misbehavior should surely be a subject worthy of considerable interest and study. Only when the dynamics of such inappropriate and deleterious behaviors are understood can we expect the problem to be alleviated.

While there have been many speculative articles on the subject of classroom misbehavior, and well-intentioned advice abounds regarding it, there is little empirical research reported. Substantive research is needed to provide insight into this perplexing classroom problem. The Eau Claire County Youth Study was designed specifically to make a contribution in this area.

Phases I and II

The major interest of these phases of this research project was children who were identified by their teachers as consistently manifesting either socially approved or disapproved behavior in the classroom. Each of the third, sixth, and ninth grade teachers in the public and parochial schools in Eau Claire County, Wisconsin, was asked to nominate from his class the two boys and the two girls who displayed the most socially approved behavior and the two boys and the two girls who displayed the most socially disapproved behavior. A behavior problems check list was developed and each teacher was asked to check the characteristics which were found consistently or frequently in each nominee. The check list of negative behavior characteristics was: quarrelsome, sullen, rude, defiant, resentful, steals, lies, destructive, disrupts class, is a bully, has temper tantrums, overly dominant, talks back, cruel, tardy or absent without excuse, profanity or obscenity, fights with other pupils, and deceptive. Approved behavior was defined for the teacher in such terms as industrious, productive, good-natured, ambitious, cooperative, and truthful.

Nominations were received from 259 teachers. One hundred ninetytwo disapproved youngsters were drawn randomly from a pool of 568 nominations, with the additional specification that there be at least two characteristics checked on the behavior problems check list. Another 192 children were drawn randomly from a pool of 982 nominations of approved boys and girls. The sample was drawn to assure equal numbers by sex, grade, and location, urban or rural.

A trained interviewer-examiner was assigned to conduct the complete interviewing and testing of each selected child and his family. The interviewer met with the father, mother, and child individually to secure responses to structured interview instruments. On the basis of his contacts with the family, the interviewer evaluated the family according to the Glueck rating scales (Glueck, 1950) and a second special rating scale. The interviewer also administered three psychological instruments to each child: the Kvaraceus Delinquency Proneness Scale, the Sentence Completion Form, and the Situation Exercises.

Summary of Results

Strong relationships between classroom behavior and various facets of the child's family life were revealed. Furthermore, the two groups differed significantly in their responses to the types of psychological tests used in the study. The intensive evaluation of the personal backgrounds and activities of these approved and disapproved children indicated that it might be appropriate to refer to the two groups as "advantaged" and "disadvantaged" children.

As contrasted to the approved or "advantaged" child, the child who was displaying socially disapproved classroom behavior was found to be growing up with the following familial "disadvantages":

1. The discipline by the father was either lax, overly strict, or erratic.
2. The supervision by the mother was unsuitable or only fair.
3. The parents were indifferent or even hostile toward the child. Their influence seemed to take the form of much "don't" or "don't care" but very little "do."
4. The family acted only somewhat or not at all as a unit.
5. The parents generally did not talk things over regarding the child.
6. The parents did not have a close and equal partnership in their marriage.
7. The parents disapproved of many things in their child.
8. The parents had difficulty in controlling their tempers and often resorted to angry physical punishment.
9. The parents depreciated their influence on the development of their child, assigning responsibility for his actions to others.
10. Many of the parents reported no church membership. Even if members of a church, their attendance tended to be sporadic.
11. The parents tended to have less education and were engaged in lower level occupations.

As compared to the approved or "advantaged" child, the child who was displaying socially disapproved classroom behavior tended to manifest the following characteristics:

1. The child was disruptive and aggressive in the classroom.
2. The child was apt to have low or only average intelligence.
3. The achievement of the child in arithmetic and reading was low, even lower than might be expected on the basis of his intelligence.
4. The child was likely to have a low opinion of adults, including teachers, and was sometimes harsh in his evaluation of them.
5. The child, particularly if a girl, rejected the parents as models for behavior.
6. The child was oriented away from the classroom and he thought more of himself in terms of the world outside the school.

The results from the three psychological tests were consistent with the other findings. The children who were displaying socially disapproved classroom behavior gave more responses on the Kvaraceus Delinquency Proneness Scale (Kvaraceus, 1950) which revealed negative or self-defeating attitudes than the approved children. The difference between groups was greatest at the ninth grade level and smallest at the third grade level. Scores on the KD scale were also subdivided into five diagnostic categories. The disapproved children were found to have less favorable attitudes toward school, fellow students, occupational planning, adult control, and problems of misconduct than the approved children.

Findings were also consistent for the two semi-projective tests, the Sentence Completion Form and the Situation Exercises. The results of the Sentence Completion Form showed that the disapproved children gave more responses reflecting socially undesirable ways of reacting than did the approved children. Finally, the Situation Exercises (four story reaction tests which described a child in a frustrating situation and called for ideas as to what the child would do) revealed that disapproved urban children as a group gave more socially maladaptive responses than approved urban children to frustration situations involving accusations of cheating and punishment for an unavoidable mistake. Differences between approved and disapproved rural children were not significant. On the Situation Exercises the disapproved children scored significantly lower than the approved children in the defendance need. That is, they would give fewer responses indicating a need to explain, interpret, rationalize, or justify their misbehavior.

As is true for all psychological information showing group differences, it should be pointed out that no disapproved child or his family would have all of the characteristics nor is it likely that many approved children would be completely free from these characteristics. The pattern of background factors and personal characteristics is undoubtedly unique for each child, approved or disapproved. But when many of these disadvantages are present, the child possessing them is more likely to encounter difficulty in the classroom than when such factors are not present in his life.

Discussion

It is acknowledged that virtually all children show some socially disapproved behavior, at least occasionally, in the normal process of growing up. But misbehaviors of this order should not be confused with persistently aggressive and disruptive behavior which takes the form of cruelty to other children, destruction of school property, and defiance of the teacher. Clearly stubborn, hard-core disruptive and aggressive behavior characterizes only some children while occasional and less serious misbehaviors are characteristic of most children. This research was concerned with stubbornly severe misbehavior and its opposite, persistent socially approved behavior.

It was beyond the scope of this study to do more than speculate about the causes of the "disadvantages" associated with classroom aggression. This would seem to be a most appropriate area for further intensive research. It seems reasonable, however, to assume that the family reflects the personalities, attitudes, ideals, aspirations, and happiness of its individual members. Speaking generally, it would seem that uncertainty and indecision were characteristics of the parents of the disapproved children. They tended to depreciate their influence on the development of their child. They were inclined to assign responsibility for his actions to others. Those who indicated church attendance did not always attend as regularly as might be expected. The influence of these parents seemed to take the form of much negative but very little positive direction.

The relationship of parental education and occupation to the child's classroom behavior was substantial. Aggressive children were likely to have parents who had less education and who were in comparatively lower level occupations than the parents of approved children. The lower occupational status may mean that the family was financially insecure with a dismal economic future. Financial strains could exaggerate existing familial and personality problems within the home and hence directly influence the home atmosphere in an unhappy fashion. On the basis of this study's findings, the conditions of living in the rural areas seems to be particularly conducive to the development of these "disadvantages" involving education and finances.

The early misbehaviors of the classroom aggressor may also be reactions based partly upon the similarity of the classroom and home in that both are sources of frustration and failure. The early misbehaviors may produce further difficulties for the child in his relationships with the teacher and with other children which in turn make the classroom *per se* a more and more likely source of frustration for the child. A form of vicious, downward spiraling of effective adjustment may thus emerge. Even by the third grade, the classroom aggressor has begun to demonstrate academic deficiencies, particularly in reading and arithmetic, in comparison to the achievement levels of his classmates. During the course of his schooling the child may become identified increasingly with other disapproved youngsters and decreasingly with students who conduct themselves in an approved manner. He may come to regard himself as unruly, disruptive, and defiant. He may seek out the company of those other students who have a similar view of self. Over its period of development, this reactional pattern becomes more and more a part of the stable behavior pattern of the disapproved child. The results of the psychological tests support this view that the reactional pattern crystallizes as the child moves from third, to sixth, and to ninth grade.

For the approved or advantaged child, a similar process may be occurring, although in the opposite direction. He is less likely to have much frustration within his home. He comes to school better prepared to meet its challenges. He profits from his academic experiences and gains some satisfaction on this basis. His emerging self-concept is described in the terms of approved behaviors such as industrious, good-natured, ambitious, truthful, and cooperative. He looks at himself in terms of these favorable adjectives. He is less likely to engage in behavior which is contrary to this developing self-image, for to do so might result in his having to relinquish favor and prestige. He seeks out other individuals who conduct themselves as he does. All of these forces and experiences tend to impel the approved children into common experiences with one another.

Recommendations derived from Phases I and II

Help for the child whose behavior is becoming persistently aggressive probably should begin in the early grades before self-concepts and personality patterns become stabilized. Responsibility for the remedial effort would probably have to be taken by the school working in conjunction with the community's social welfare agencies and psychological clinics.

Remedial efforts should probably take the form of help to alleviate aggression-inducing frustration both within the home and the classroom. Extended social work contact with the parents will probably be necessary in alleviating the relevant difficulties within the home. Clergymen could make a substantial contribution in this regard. In the school, attempts might be made to offset the classroom engendered aggressions by helping the child to experience success and satisfaction in a remedial education program, designed to fit his special needs. Such a program would need to provide new learning experiences at achievement levels at which the child could experience success and satisfaction.

Teachers should also take every opportunity to learn about these aggressive children and their parents. In most cases very little will be done to help these children if their teachers do not take the initiative in studying their problems and in trying to secure or provide remedial assistance for them. In-service meetings and special university classes can provide some of the knowledge which the teacher needs in order to meet these problems effectively. Psychological and social work consultants can also provide much assistance to the teachers. Through the consultants, other community agencies can become actively involved as part of a comprehensive "help" program for these children.

Classroom aggression, in and of itself, is serious enough to justify much more research. But, if as has been suggested, a relationship exists between classroom aggression, school dropout, and juvenile delinquency, the importance of and urgency for additional research in this area is increased enormously.

The findings of Phases I and II revealed several areas in need of further investigation.

Phase III Introduction

Research into the relationship between classroom aggression, school dropout, and juvenile delinquency assumed a high priority. In view of the possible consequences of the academic deficiencies of the classroom aggressors, it seemed worthwhile to attempt some remediation and to assess its efficacy.

The demonstrated relationships between family life and classroom deportment suggested several courses of action. Primary among these were explorations of the etiology of these "disadvantageous" home circumstances and an assessment of programs designed to modify these in such a way as to mitigate their impact upon the children.

Extended discussions were held regarding the direction that Phase III might take. Determining factors included the nature of the community, judgments regarding relative scientific contribution of different approaches, availability of professional personnel, interests of researchers. The final decision was that Phase III should take two forms: 1) a major longitudinal evaluation of the relationships among classroom aggression, social adjustment, and subsequent academic achievement, and juvenile delinquency. 2) an exploratory pilot study into the effects of remedial reading upon the academic achievement and psycho-social adjustment of children who were regarded as classroom aggressors in the third grade.

Chapters 2, 3, and 4 to follow will detail background considerations, design, results, and discussion of the longitudinal and remedial reading studies. Chapter 5 summarizes Phase III findings and recommendations.

References

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Chapter 2

Longitudinal Analyses of the Relationship Between Classroom Behavior and School Achievement

Reviews of the research on delinquency and aggressive classroom behavior (Quay, 1965) along with the results from the Eau Claire County Youth Study (Thurston, Feldhusen, and Benning, 1964; Feldhusen, Thurston, and Benning, 1965) indicate that children who persistently behave in aggressive and disruptive ways in the classroom, when compared with their non-aggressive peers, are delinquency prone, lower in intelligence, lower in basic scholastic achievement than would be predicted on the basis of their intelligence, and have had more contacts with law-enforcement agencies at the junior and senior high school age level.

One of the most thorough recent reviews of the relationship between intelligence and delinquency is reported by Caplan (1965). He pointed out that many early researchers found greater differences in intelligence between delinquent and non-delinquent youngsters than have been found in studies conducted during the last two decades. Recent studies have indicated that the difference is typically about eight or nine IQ points between group means, with much overlap between the distribution of scores. In addition, studies using tests with verbal and performance scales have revealed that within the delinquent group, the mean for performance tests runs higher than the mean for verbal and abstract tests. Caplan concluded that new approaches are needed to study the intellectual functioning of the delinquent. He indicated that a clearly stated operational definition of delinquency would be a necessity at the outset. He also felt that the study of intelligence should be extended to include other aspects of cognitive functioning such as school achievement or learning.

Eichorn (1965) reviewed research on the relationships between delinquency and conduct in the educational system. He reported that early signs of delinquency such as academic underachievement and behavioral problems are obvious in school. He also suggested that academic difficulty is apt to be the first of these signs. The classroom misbehavior of the pre-delinquent was generally found to appear earlier and to become more serious and persistent than that noted in children who do not become delinquents. Eichorn suggested two possible explanations for the aggressive and disruptive school behavior of pre-delinquents and delinquents. First, they suffer daily academic frustrations which appear to increase progressively from grade to grade. Second, their teachers, who are often of middle class background and not well trained to deal with aggressive behavior, frustrate the child still more by the ways they handle or respond to the child's aggression.

In _Juvenile Delinquency Prevention in the United States_ (Children's Bureau, 1965), the conclusion was drawn that the maladjustment of delinquents and pre-delinquents shows up early in emotional and social problems, in serious school misconduct, and in academic underachievement.

In the 1966 _Review of Educational Research_ which focussed on exceptional children, Balow suggested that the intelligence of delinquents as a group continues to be a controversial issue. He also concluded that the relationship of delinquency to academic difficulty continued to be supported by research evidence.

A review of delinquency research in Japan by De Vos and Mizushima (1962) confirmed in another culture the impression that the delinquent has a history of difficulty in school achievements and of aggressive and disruptive school behavior. Douglas (1966) reported that British children who were "troublesome" in school were also low achievers.

Briggs, Johnson, and Wirt (1962) also reported that delinquency prone youngsters were low achievers in school, even when intelligence and social status were neutralized or controlled as correlated variables. In his review of the educational problems of delinquency, Travers (1964) concluded that nine out of ten delinquents persistently misbehaved in school and suffered from intellectual inferiority and poor achievement.

Feldhusen, Thurston, and Benning (1967) studied a sample of 100 third and sixth grade youngsters who had been nominated by teachers as persistently displaying aggressive, disruptive and anti-social classroom behavior and a sample of 100 from these grades who were nominated as displaying socially approved behavior. There were equal numbers of boys and girls and of third and sixth graders. Scores on group intelligence and achievement tests in reading and arithmetic were obtained for the end of the year in which they were nominated. An "achievement discrepancy" score was calculated for each child. This score was the difference between the expected grade equivalent score and the child's actual score on the achievement test. An analysis of covariance design with IQ as the covariate was used to analyze the data. At the third grade level, the covariance analysis revealed no significant difference between the children whose behavior was socially approved and those whose behavior was aggressive and disruptive. However, it was found that the sixth graders whose behavior was socially approved were significantly higher in achievement in both reading and arithmetic than the aggressive, disruptive sixth graders.

These findings suggest that in the time between third and sixth grades, the rates of learning of the aggressive-disruptive children in reading and arithmetic do not keep pace with those of the children whose behavior was socially approved. In other words, at the sixth grade level, the substantial differences in scholastic achievement between the groups could no longer be accounted for on the basis of different IQ levels.

It should also be noted, however, that the aggressive-disruptive children in this research were not achieving at a sub-normal level by the normative standards for the tests. Their inferiority was established in comparison with their peers whose behavior was socially approved. Since the standards of performance in most classrooms are probably established in large part by the group of youngsters enrolled in classes and not by national norms, this, of course, still suggests that the aggressive disruptive children were underachievers in relation to their peers.

Procedure for Sample Selection for the Eau Claire County Youth Study

A special nomination instrument was prepared and submitted to all the public and parochial teachers of grades three, six, and nine throughout an entire county in Wisconsin. Each teacher was required to nominate the two boys and two girls who were most socially disapproved and the two boys and two girls who were most socially approved in his classroom. A "socially approved" child was described by such terms as: "Industrious, productive, good-natured, ambitious, cooperative, truthful, and performs required tasks on time." A "socially disapproved" child was defined as:

"Disrupts class, bullies others, has temper tantrums, is overly dominant, is tardy or absent without excuse, talks back, lies, and is cruel."

The teacher was also required to check, on a list of eighteen aggressive and disruptive problems, those which were displayed habitually or persistently by each child she nominated. These eighteen problem categories were as follows: is quarrelsome, is sullen, is rude, is defiant, is resentful, steals, lies, is destructive, disrupts class, is a bully, has temper tantrums, is overly dominant, talks back, is cruel, is tardy or absent without excuse, uses profanity or obscenity, fights with other pupils, is deceptive.

A total of 982 youngsters were nominated as approved and a total of 568 as disapproved during the two school years of 1961 through 1963. From this pool of 1550 youngsters, a sample of 384 children was drawn randomly for intensive study during the period of 1961 to 1964. They were selected so as to insure equal representation according to behavior as socially approved or disapproved by the teacher nomination; grade level as three, six or nine at the time of nomination; home location as urban or rural; and as boys or girls. Each of the youngsters and their parents were interviewed by a trained social worker; three psychological tests - the KD Proneness Scale, a situation exercise test, and a sentence completion form - were administered to each child individually. Each child was rated for delinquency proneness using the Glueck social factors for delinquency. Data on academic achievement, intelligence and adjustment information were secured from school records. The results of the research through 1965 are reported in Classroom Behavior: Background Factors and Psycho-Social Correlates (Thurston, Feldhusen, and Benning, 1964) and

Delinquency Proneness and Classroom Behavior (Feldhusen, Thurston, and Benning, 1965).

Design of this Longitudinal Study

In 1965 a follow-up of the children who had been nominated in 1961 was undertaken to assess their intellectual development as reflected in school achievements. Specifically the question was asked: Are there differences in school achievement between children who were nominated as displaying socially approved behavior and children who were nominated as displaying aggressive-disruptive behavior when achievement is assessed five years after the original nominations?

Teacher grades in English, science, mathematics, and social studies were secured for a sample of 240 youngsters who had been nominated at the end of the third or sixth grades in 1961 or 1962 and who were finishing grade eight or eleven in 1966 or 1967 but who had not been studied intensively (who are referred to hereafter as "nominees") and for 160 youngsters who had been studied intensively ("intensives") during the period 1961 to 1964. The teacher grade in each area was defined as the grade average for the year in a particular course. An A was assigned the value of 4; a B, 3; a C, 2; a D, 1; and an F, 0.

Scores from the Sequential Tests of Educational Progress (STEP) for reading, writing, social studies, science, and mathematics were secured for a sample of 160 of the 1961 and 1962 "nominees" and for 80 of the "intensives."

The percentile rank in graduating class was the criterion achievement score secured from school records along with IQ for the youngsters who had been nominated in 1961 or 1962 when they were in ninth grade. Data, including IQs, was secured for 64 "intensives" and 40 "nominees."

For the youngsters originally nominated as third and sixth graders, a four-way analysis of covariance design was used for the teacher grades and a three-way analysis of covariance for STEP scores with IQ as the covariate in each instance. The independent variables in the four-way analysis were behavior as socially approved or disapproved, grade as eight or eleven, home location, and sex. Home location was the variable dropped in the three-way analysis because of small N (The N was smaller for the STEP analyses because of the number of cases with missing data.). The dependent variables were the teacher grades and the STEP achievement scores.

The achievement analyses for the original ninth graders who were now out of school were run with IQ as the covariate; with behavior, home location, and sex as the independent variables; and with rank in graduating class, normalized with an arcsin transformation (Snedecor, 1956, p. 316), as the dependent variable. The arcsin transformation was necessary because scores for rank in graduating class form a flat distribution while the analysis of variance assumes a normal distribution.

Further analyses of achievement were undertaken for youngsters who had been studied intensively in 1961 to 1963 and for whom scores on the KD Proneness and the Glueck Delinquency Scale were available and for whom achievement data were available in 1966-1967. At the level of original third and sixth grade "intensives," teacher grades were available for 123 low Glueck scorers (not delinquency prone) and 74 high scorers (delinquency prone); STEP scores were available for 75 low scorers and 37 high scorers. Low scorers were those whose overall Glueck score was in the lowest classification (Glueck and Glueck, 1959) while high scorers had been rated in three other categories for delinquency proneness.

Analyses of high and low KD scorers (high KD scorers are delinquency prone) were also run. The dividing line was -5 KD points and down for low scorers and -4 and up for high scorers. For original third and sixth graders, teacher grades were available for 101 high and 96 low scorers; STEP scores were available for 55 high and 57 low scorers. For the original ninth graders, data for percentile rank in high school graduating class were available for 50 high and 47 low KD scorers.

In all cases where analyses are run for both "intensives" and "nominees," it is assumed that the latter constitute a cross-validation of results on the "intensives." That is to say, the research is run on two independent samples which provide information to serve as a check or cross-validation on one another.

For all of the analyses to be reported in this research, differences, F ratios (Fs), or chi-squares will be judged significant when an F or chi-square value achieves the .05 probability level. Significance will be reported at the .05 and .01 levels.

Results for Analyses of Teacher Grades for Third and Sixth Graders

Intensives

The teacher grades in English, science, mathematics, and social studies were analyzed with an analysis of covariance (anacova) design using IQ as the covariate. The analyses for children who had been studied intensively in 1961 and 1962 are presented first. For each set of grades, the analysis of covariance (anacova), an analysis of variance (anova), and means are presented.

Tables 2.1, 2.2, and 2.3 present the anacovas, anovas, and means for teacher grades for "intensives" and for "nominees." For English grades the F ratio for behavior (49.26, 1 and 143 df) was highly significant. Approved children had a mean English grade of 2.98 while disapproved children had a mean of 1.76. The F for sex (23.09, 1 and 143 df) was also highly significant. Girls had a mean of 2.71, boys, 2.02. Two significant interactions were also found but are not interpreted because they were very small in relation to the large main effects.

The anacova, anova, and means for teacher grades of "intensives" in science are presented next. Again the main effect of behavior was highly significant (F = 33.40, 1 and 143 df). Approved children had a mean science grade of 2.81, disapproved, 1.66.

The analyses for teacher grades in mathematics yielded an F ratio for behavior (27.31, 1 and 143 df) which is highly significant, while the Fs for grade, location, and sex were low but significant at the .05 level. The mean for approved children was 2.69, for disapproved children, 1.70. The means for grades eight and eleven were 2.37 and 2.02, respectively; for urban children, 2.03, for rural, 2.36; and for boys, 2.01, for girls, 2.38.

The analyses for teacher grades of "intensives" in social studies revealed a main effect for behavior which is highly significant (F = 30.69, 1 and 143 df), and the sex effect produced an F of 4.70 (1 and 143 df).

The mean for approved children was 2.83, for disapproved, 1.70. The mean for boys was 2.06, for girls, 2.47.

Nominees

The analyses of teacher grades for "nominees" (children who had been nominated in 1961 or 1962 but not studied intensively) were limited to anovas since IQs were not available for these children. These analyses are presented because they represent an effort at cross-validation of the results with intensively studied children. That is, do we obtain similar findings in these two independent samples? The analyses of variance are given in Table 2.2 and the means in Table 2.3. The anova and means for teacher grades of nominees in English produced Fs for behavior (76.07, 1 and 224 df) and for sex (31.30, 1 and 224 df) which are highly significant while the F for behavior by location (8.32, 1 and 224 df) was much smaller but still significant at the .01 level. The mean for approved children was 2.76, for disapproved, 1.71; for boys, 1.90, and for girls, 2.57. The means for approved and disapproved urban children, 3.02 and 1.63, differ more than the means for approved and disapproved rural children, 2.50 and 1.80.

The analyses of the teacher grades in science for "nominees" produced an F for behavior (62.31, 1 and 224 df) which is highly significant. The Fs for sex and for the behavior by location interaction (11.52 and 17.28, each with 1 and 224 df) are also significant at the .01 level. Weak but significant interactions were found for behavior by sex (4.40, 1 and 224 df), grade by sex (4.40, 1 and 224 df), and behavior by grade by location (5.77, 1 and 224 df). The mean for approved children was 2.62, for disapproved, 1.76; for boys, 2.00, for girls, 2.38. The means for approved and disapproved urban children, 2.94 and 1.63, differed more than the means for approved and disapproved rural children, 2.30 and 1.89.

The anovas for teacher grades in mathematics for "nominees" revealed an F for behavior (51.45, 1 and 224 df) which is highly significant while the F for sex (10.39, 1 and 224 df), although lower, is also significant at the .01 level. Again the F for behavior by location (6.76, 1 and 224 df) is significant at the .01 level. Finally there is a weak three-way interaction. The means for approved and disapproved children were 2.51 and 1.65; for boys and girls, 1.88 and 2.27. The means for approved and disapproved urbans, 2.63 and 1.46, differ more than the means for approved and disapproved rural children, 2.38 and 1.83.

The analyses for teacher grades of "nominees" in social studies are presented next. The pattern of significant Fs is the same: behavior, 56.02 (1 and 224 df); sex, 5.06 (1 and 224 df); and behavior by location, 6.68 (1 and 224 df). Approved children had a mean of 2.62, disapproved, 1.69; boys, 2.02, girls, 2.30. For approved and disapproved urban children, the means, 2.84 and 1.59, differ more than the means for approved and disapproved rural children, 2.40 and 1.79.

Results for Analyses of STEP Scores for Third and Sixth Graders

Intensives

Inasmuch as the available sample sizes were relatively small, the analyses of STEP scores were done with a three-way anova and anacova rather than the four-way design which was used for teacher grades. The factor of home location was dropped as an independent variable. The analyses for "intensives" are presented first. Since IQs were available for this sample, all of these analyses are of the covariance design. For the STEP scores of the "nominees" analyses of variance design was used since IQs were not available.

In order to test for differences in IQ between behavior groups, an analysis of variance of the IQ scores was undertaken. While the samples for the analyses of teacher grades and STEP scores were not identical, it was assumed that IQ differences could be estimated adequately using either one of the two samples. The anova for IQs is given in Table 2.4 and the IQ means in Table 2.6. The F ratio for behavior, 15.39 (1 and 72 df), is highly significant. The mean IQ for approved children was 111.73, for disapproved, 103.60.

The analyses of variance and covariance together with the means for STEP reading scores of "intensives" are given in Tables 2.4 and 2.6. The main effect of behavior is highly significant ($F = 22.58$, 1 and 71 df). The mean for approved children was 52.83, for disapproved, 41.13. These means for STEP scores represent an abbreviation. That is, the usual three-digit STEP scores were rounded to two digits.

The analyses of STEP writing scores of "intensives" resulted in a main effect of behavior which is again significant (F = 9.36, 1 and 71 df) and the F for sex, 10.83 (1 and 71 df), is also significant. The means for approved and disapproved children were 39.35 and 30.68 while the means for boys and girls were 31.20 and 38.83.

In the analyses for STEP social studies scores of "intensives," the Fs for behavior, 12.76 (1 and 71 df), and for grade, 40.72 (1 and 71 df), are both highly significant. The behavior means were 48.20 and 38.13 for approved and disapproved children, respectively. The grade level means were 49.08 and 37.25 for eighth (original third graders) and eleventh (original sixth graders) graders.

The analyses for STEP science scores of "intensives" yielded Fs for behavior and grade which are highly significant, 11.39 (1 and 71 df) and 46.01 (1 and 71 df), respectively. Approved children had a mean score of 37.53, disapproved, 31.08. The eighth grade mean was 39.70, eleventh grade, 28.90.

Finally the analyses for STEP mathematic scores for "intensives" produced Fs for behavior and sex, 15.01 (1 and 71 df) and 8.81 (1 and 71 df), which are both significant at the .01 level, while the F for grade, 4.87 (1 and 71 df) is significant at the .05 level. The mean for approved children was 30.35, for disapproved, 21.80. Boys had a mean of 27.60, girls, 24.55. The eighth grade mean was 27.70, eleventh grade, 24.45.

Nominees

The analyses of STEP scores for "nominees," children who were not studied intensively in 1961 and 1962, who were now in grades eight or eleven in 1966 and 1967, are given next in Tables 2.5 and 2.6. Since IQs were not available for this sample, all of these analyses were run simply as analyses of variance.

The anova for these STEP reading scores produced significant Fs of 35.66 (1 and 152 df) for behavior and 4.24 (1 and 152 df) for grade. The approved and disapproved had means of 50.04 and 40.00 while for eighth and eleventh graders the means were 43.29 and 46.75. The means closely parallel the STEP reading scores of the "intensives."

Analyses of STEP writing scores of "nominees" yielded a behavior F, 43.16 (1 and 152 df), which is highly significant. The F for sex, 4.61 (1 and 152 df), is just barely significant at the .05 level. The mean for approved children was 38.98, for disapproved children, 30.10. Girls, with a mean of 35.99, outscored boys whose mean was 33.09.

The analyses for STEP social studies scores of "nominees," as reported in Tables 2.5 and 2.6, produced F ratios of 48.75 (1 and 152 df) for behavior and 65.95 (1 and 152 df) for grade. The means for behavior were 47.91 and 37.49, for approved and disapproved children while the means for grades eight and eleven were 48.76 and 36.64, closely paralleling the results for STEP social studies scores of intensives.

Analyses of STEP science scores of "nominees" resulted in Fs for behavior and grade, 45.83 (1 and 152 df) and 45.28 (1 and 152 df), which are both highly significant, while the F for sex, 6.45 (1 and 152 df), is just significant at the .05 level. The means for approved and disapproved, 37.54 and 29.18; for eighth and eleventh graders, 37.51 and 29.20; and for boys and girls, 34.93 and 31.79; were closely parallel to the STEP science means of the children studied in the intensive sample.

For STEP mathematics scores of "nominees," the analyses, as given in Tables 2.5 and 2.6 produced Fs of 37.06, 9.46, and 12.40 for behavior, grade, and sex (all with 1 and 152 df), all of which are significant at the .01 level. These results constitute a close parallel to the STEP mathematics analyses for "intensives." Here the means were 29.39 and 22.21 for approved children and disapproved children, 27.61 and 23.99 for eighth and eleventh graders, and 27.88 and 23.73 for boys and girls.

Results of Analyses of Data for Rank in Graduating Class of Original Ninth Graders Who Were no Longer in School

The achievement analyses for the original ninth graders who were graduated from school in 1966 and 1967 were done with rank in high school graduating class as the criteria data. All of the analyses, however, were done with the rank scores converted to arcsin equivalents. This conversion was made because rank scores are not normally distributed. For the youngsters who were studied intensively in 1961 or 1962, IQs were available and a covariance design was used. For 1961 and 1962 "nominees," who had not been studied intensively, IQs were not available so the analysis of variance design was used.

Intensives

The analyses of IQ for the sample of "intensives" are given in Tables 2.7 and 2.8. The F for behavior, 18.73 (1 and 56 df), is highly significant. The means were 118.63 and 104.78 for approved and disapproved youngsters, respectively. Thus, the use of a covariance analysis seemed particularly necessary.

The analyses of the scores for percentile rank in graduating class are also given in Tables 2.7 and 2.8. The anacova and anovas were done with a three-way design for behavior, home location, and sex. Table 2.7 gives the covariance analysis in which the arcsin converted scores were used. The main effects of behavior (F = 20.06, 1 and 55 df) and sex (F = 9.30, 1 and 55 df) were significant. Anovas for these same scores were also run, with and without the arcsin transformation as reported in Table 2.7. The means are given in Table 2.8 in both mean rank form and mean arcsin form. The higher the mean rank, the higher the position in the graduating class. That is, the top ranking graduate would be at the 99th percentile and the bottom person at the first percentile. Approved youngsters had a mean rank in graduating class of 69.19, disapproved youngsters, 27.50. Boys had a mean rank of 40.81, girls, 55.88.

Nominees

The analyses of rank in graduating class of the "nominee" sample, for whom IQs were not available, are also given in Tables 2.7 and 2.8, with and without the arcsin transformation. In both analyses the Fs for behavior, 56.59 (1 and 32 df) and 60.53 (1 and 32 df), are highly significant. The Fs for location and for behavior by sex interaction were also significant at the .05 level. The mean rank for approved youngsters was 74.05, for disapproved youngsters, 25.40; for urbans, 42.00, for rurals, 57.45. The mean ranks for approved and disapproved males, 74.90 and 13.20, differed much more than the means for approved and disapproved females, 73.20 and 37.60.

Results for the Analyses of Achievement of High and Low Scorers on the Glueck Scales

Teacher Grades

The analyses of teacher grades of high and low scorers on the Glueck scales are presented next for the original third and sixth grade sample. High scorers are delinquency prone, low scorers are non-delinquency prone. Results are presented only for "intensives" inasmuch as no Glueck scores were available for "nominees."

The analysis of variance of teacher grades in English is given in Table 2.9. A two-way unequal Ns design for Glueck score level and sex was used. The F for Glueck level, 12.35 (1 and 193 df), and for sex, 16.21 (1 and 193 df), were both significant at the .01 level. The means are also given in Table 2.9. Low scorers (non-delinquency prone) had a mean of 2.57, high scorers, 2.01. Girls had a mean of 2.65, boys, 2.04.

Analyses for science grades are also given in Table 2.9. Only the F for Glueck level, 10.33 (1 and 193 df), is significant. The mean for low Glueck youngsters was 2.42, for high, 1.93. Analyses for mathematics grades are given next in Table 2.9. The F for Glueck score, 5.23 (1 and 193 df), is significant at the .05 level. The mean grades were 2.25 and 1.89 for low and high scorers, respectively. Finally, the analyses for social studies grades are given. The F for Glueck level, 11.45 (1 and 193 df), is highly significant. The means were 2.48 and 1.94 for low and high scorers.

STEP Scores

The analyses for STEP scores of high and low Glueck scorers who were now in eighth or eleventh grade are presented next in Table 2.9. For STEP reading scores, the F for Glueck level is 11.53 (1 and 108 df), which is highly significant, and the means for low and high Glueck scorers were 47.91 and 40.84. The analyses of STEP writing, reported next in Table 2.9, produced Fs of 8.87 (1 and 108 df) for Glueck level and 15.09 (1 and 108 df) for sex, both of which are significant at the .01 level. The low Glueck mean was 35.67, the high Glueck mean, 30.16. The boys' mean was 30.30, girls', 37.03. For social studies, only the F for Glueck level was significant (F = 5.76, 1 and 108 df). Low scorers had a mean of 43.17, high scorers, 37.76.

The analyses for STEP science are given next in Table 2.9. The F for Glueck level (F = 5.35, 1 and 108 df) is significant at the .05 level. Low scorers had a mean of 34.65, high scorers, 30.49. Finally, the analyses for STEP mathematics are presented. The Fs for Glueck (5.14, 1 and 108 df) and sex (5.92, 1 and 108 df) are both significant at the .05 level. Low Glueck scorers had a mean of 26.40, high scorers, 22.97; boys, 27.11, girls, 23.61.

Rank in Class

The results for the analyses of percentile rank in graduating class of original ninth graders (1961 and 1962) who were out of school in 1966 and 1967 are given last in Table 2.9. The anovas are reported both with and without the arcsin transformation. Either way, the F for Glueck level is highly significant (Fs of 15.05 and 14.05, each with 1 and 108 df). Low Glueck scorers had a mean rank of 62.64, high scorers, 37.30.

Results of the Analyses of Achievement of High and Low KD Scorers

High and low scoring youngsters on the Kvaraceus Delinquency Proneness Scale were identified by using a KD score of -5 and down as describing the low group and a KD score of -4 and up as the high group. On this scale a high score indicates delinquency proneness. Analyses are reported first for children who were first identified in third and sixth grade and whose longitudinal achievement on teacher grades and STEP were assessed in grades eight and eleven.

Teacher Grades

The analyses of achievement as reflected in teacher grades of high and low KD scorers are presented first. Table 2.10 gives the results of these analyses. There were no significant differences in grades between the KD score levels. One interaction of KD by sex was significant for mathematics grades (F = 4.14, 1 and 193 df). High KD boys (delinquency prone) had a significantly lower mean, 1.70, than low KD boys, 2.18, but the difference between high and low KD girls was not significant. Several main effects for sex were significant but are not of concern in this study.

STEP Scores

The analyses of STEP scores for the high and low KD groups are also presented in Table 2.10. The main effect of KD score level is significant only for STEP reading (F = 4.31, 1 and 108 df). High KD scorers had a mean of 43.64, low KD scorers, 47.46.

The interaction of KD level by sex was significant for all other STEP scores (Fs of 7.10, 4.20, 7.73, and 4.87; 1 and 108 df). For STEP writing, high KD boys had a significantly lower mean, 26.52, than low KD boys, 33.20, but the difference between high and low KD girls was not significant. For STEP social studies scores, the mean for high KD girls, 44.34, was significantly higher than the mean for low KD girls, 38.30. The difference between high and low KD boys is not significant.

For STEP science scores, the analysis revealed an interaction of KD level and sex which is significant at the .01 level (F = 7.73, 1 and 108 df). Again, the difference between high and low KD boys is not significant, but high KD girls had a significantly higher mean STEP science score, 34.44, than low KD girls, 28.44.

Analyses of STEP mathematics scores for high and low KD scorers as reported in Table 2.10 resulted in an interaction of KD level and sex which is significant, 4.87 (1 and 108 df). The mean for high KD boys, 23.78, was significantly lower than the mean for low KD boys, 29.67. The difference between girls was not significant.

Rank in Class

The analyses of high and low KD scorers at the ninth grade level are also reported in Table 2.10. Again, the arcsin transformation was used. Anovas with and without the transformation were run. The main effect of KD level is highly significant (F = 27.55, 1 and 93 df), while the sex effect is significant at the .05 level (F = 5.84, 1 and 93 df). High KD youngsters had a significantly lower mean rank in graduating class, 39.46, than low KD youngsters, 69.51. The mean rank for girls, 59.84, was significantly higher than the mean for boys, 48.08.

Discussion

The results from the analyses of teacher grades in English, science, mathematics, and social studies are powerful for the "intensive" sample and are cross-validated conclusively with the "nominee" sample. School achievement as reflected in teacher grades is much lower for children who were nominated because of anti-social behavior in school than for children whose behavior was socially approved. Five years after the original identification, with IQ controlled or partialled out as a variable, the difference in achievement between approved and disapproved youngsters is still powerful.

But perhaps the teachers' grades reflect factors other than those of academic achievement, *per se*. Approach the problem, then, from the view of STEP scores in reading, writing, social studies, science, and mathematics. Again remove IQ as a confounding variable. Test the hypothesis on two samples -- "intensives" and "nominees." The results are the same. Children who were first identified as exhibiting anti-social behavior in grades three or six, are, five years later, achieving far below the levels for children who exhibit socially approved behavior.

Rank in graduating class was used as the achievement index for the original ninth grade sample who were now, five years later, out of school. Again with IQ controlled, and with two independent samples, the results are clear: youngsters who were exhibiting persistent anti-social behavior in ninth grade achieved at far lower levels in high school than children whose behavior was socially approved in ninth grade.

Analyses were then run for the high and low delinquency prone children on the Glueck scales. For both teacher grades and for STEP scores, the results were powerful and conclusive. Delinquency prone children, that is, children whose family living patterns were defective, will be achieving at far lower levels (teacher grades and STEP scores) than children who are not delinquency prone. Similarly, the children who had been identified in ninth grade and found to be delinquency prone on the Glueck scales and who had completed school at the time of the longitudinal study, had graduated with a far lower mean rank than the children who were not delinquency prone. The lower mean rank was an index of lower overall achievement in high school.

Delinquency proneness was also assessed with the Kvaraceus Delinquency Proneness Scale. For the original third and sixth graders, the scale was perhaps overextended since the manual suggests its use for seventh grade and up. However, with revisions, the scale was given to the third graders and the published form was used for sixth graders.

The results of the achievement analyses five years after original testing for high and low delinquency prone groups on the basis of KD scores, are inconclusive and inconsistent. Only one of the original hypotheses was substantiated. For teacher grades in mathematics, high delinquency prone boys had a far lower mean than low delinquency prone boys.

For STEP scores in reading, high delinquency prone children were significantly lower in achievement than low delinquency prone children. In writing and mathematics the difference holds only for boys, that is, high delinquency prone boys are lower in writing and mathematics achievement than low delinquency prone boys.

For STEP social studies and science, the results were reversed and hold only for girls, that is, high delinquency prone girls were achieving at higher levels in these two areas than low delinquency prone girls.

High delinquency prone ninth graders graduated at a significantly lower mean rank in their high school graduating classes than low delinquency prone children.

Relationship to Other Research Findings and Conclusions

The results of these analyses of intelligence and achievement data must be interpreted in relation to the other results of the Eau Claire County Youth Study (Thurston, Feldhusen, and Benning, 1964; Feldhusen, Thurston, and Benning, 1965) and in relation to current theoretical concepts. Two major sources of frustration appear to be crucial in the lives of these aggressive-disruptive children. One of these is a home and family background which is grossly disadvantageous in many ways. As a group, the parents have less education, are in lower level occupations, are inadequate in many child-rearing parental roles, and do not operate efficiently in the community in which they live. In general, the parents are viewed as inadequate in many ways and incapable of providing the need-satisfactions which a child requires in growing up.

The second source of frustration for these children results from their own intellectual disadvantage. This may, indeed, be attributable in part to the environment which their parents provided. In any event it is probably a serious source of difficulty when the child enters school.

After he enters school, two new potential sources of frustration present themselves. First, there is a teacher who may be strongly disapproving of aggressive and disruptive behavior by a child. Second, there will be an early opportunity to experience academic failure. The revision of the kindergarten and pre-school curricula during the last decade to include more reading and number readiness activities at an earlier age level heightens the opportunity for early failure and consequent intellectual frustration. By the end of the third grade the underachievement of the aggressive-disruptive child may be so marked as to rival low intelligence as a major in-school source of frustration. This is to say that the pupil lacking in basic skills in reading and arithmetic will be hard pressed to cope with the new learning tasks demanded by the school.

Thus, a host of frustrations have appeared to generate and perpetuate aggressive-disruptive, and socially disapproved behavior. The child strikes back at the perceived sources of his frustration and keeps striking back as long as they persist, even though his actions may serve only to increase his frustrations.

For many severely frustrated youngsters, the aggressive counter-attack is reinforced. There are classmates who applaud and encourage such behavior. The teacher may inadvertently reinforce this behavior by providing much attention which would not otherwise be forthcoming. It appears that many parents will approve the aggressive "all boy" or "tomboy" behavior of the aggressive child even though they will indicate vehement disapproval of specific misbehaviors. The child may also derive reinforcement from a realization that his behavior is very similar to that of many aggressive and successful adults in the world around him. The aggressive behavior thus may tend to become fixed or persistent because it does provide considerable satisfaction for the child that he seemingly can obtain in no other way.

Summary

The Eau Claire County Youth Study has established that children who persistently misbehave in aggressive and disruptive ways in school come from disadvantaged home backgrounds and are lower in intelligence than children whose classroom behavior is socially approved. Teachers can reliably identify these children and their behavior problems. On several well validated measures of delinquency proneness, the disruptive children were more delinquency prone than their socially approved peers. Their underachievement in school appears between grades three and six and persists through high school. Their degree of underachievement exceeds that which would be predicted from a relatively low intelligence level. The teachers' grades, as indices of achievement, show them as having accomplished less learning than do scores on standardized achievement tests.

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Analyses of Variance and Covariance for Teacher Grades of Eighth and Eleventh Grade Youngsters
Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved
Behavior and Who Had Been Studied Intensively - (Intensives)

Source	df	Teacher Grades English		Teacher Grades Science		Teacher Grades Mathematics		Teacher Grades Social Studies	
		Anova Fs	Anacova Fs	Anova Fs	Anacova Fs	Anova Fs	Anacova Fs	Anova Fs	Anacova Fs
1 - Behavior	1	88.81 **	49.26 **	69.63 **	33.40 **	51.96 **	27.31 **	61.45 **	30.69 **
2 - Grade	1	0.28	0.11	0.92	0.57	6.53 *	6.03 *	0.99	0.68
3 - Location	1	0.28	0.24	0.25	0.21	6.07 *	6.71 *	0.09	0.15
4 - Sex	1	28.78 **	23.09 **	5.84 *	2.69	7.00 **	4.44 *	7.92 **	4.70 *
1 x 2	1	0.53	1.03	0.10	0.43	2.13	1.72	0.54	1.04
1 x 3	1	4.73 *	4.02 *	2.00	1.39	3.01	2.46	2.57	1.97
1 x 4	1	1.24	0.87	0.25	0.06	0.41	0.23	4.14 *	3.63
2 x 3	1	2.86	1.95	2.55	1.57	0.30	0.08	0.83	0.34
2 x 4	1	0.01	0.02	0.35	0.30	0.30	0.26	0.68	0.89
3 x 4	1	3.55	3.96 *	2.55	3.00	1.87	1.99	5.68 *	6.30 *
1 x 2 x 3	1	0.19	0.02	0.10	0.16	0.13	0.01	1.17	0.28
1 x 2 x 4	1	0.84	0.17	0.25	0.02	0.03	0.05	1.37	0.46
1 x 3 x 4	1	0.68	1.25	0.25	0.73	2.41	3.19	0.02	0.15
2 x 3 x 4	1	0.11	0.08	0.02	0.01	0.30	0.26	0.23	0.19
1 x 2 x 3 x 4	1	0.17	2.00	1.75	2.19	0.01	0.01	0.54	0.66
Within Mean Square	144[a]	66.88	60.18	75.15	64.00	75.06	70.75	83.31	75.18

** Significant at .01 level

* Significant at .05 level

[a] 143 for Anacova

Analyses of Variance for Teacher Grades of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior but Who Had Not Been Studied Intensively - (Nominees)

Source	df	Teacher Grades English - Fs	Teacher Grades Science - Fs	Teacher Grades Mathematics - Fs	Teacher Grades Social Studies - Fs
1 - Behavior	1	76.07 **	62.31 **	51.45 **	56.02 **
2 - Grade	1	0.15	0.91	0.27	0.03
3 - Location	1	2.03	2.95	0.27	0.95
4 - Sex	1	31.30 **	11.52 **	10.39 **	5.06 *
1 x 2	1	0.64	0.33	0.01	0.25
1 x 3	1	8.32 **	17.28 **	6.76 **	6.68 *
1 x 4	1	0.10	4.40 *	0.53	0.70
2 x 3	1	0.44	1.78	1.01	0.60
2 x 4	1	0.27	4.40 *	1.01	0.19
3 x 4	1	0.10	0.04	0.27	0.01
1 x 2 x 3	1	2.90	5.77 *	4.77 *	1.71
1 x 2 x 4	1	0.10	1.06	1.47	0.33
1 x 3 x 4	1	0.27	0.77	0.06	0.33
2 x 3 x 4	1	0.35	0.33	1.31	0.14
1 x 2 x 3 x 4	1	0.10	0.91	0.01	1.38
Within Mean Square	224	86.26	71.62	86.74	92.47

** Significant at .01 level

* Significant at .05 level

Means for Teacher Grades of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior

Group	Intensives					Nominees				
	N	English	Science	Mathematics	Social Studies	N	English	Science	Mathematics	Social Studies
A8UM	10	2.90	2.95	2.90	2.80	15	2.57	2.80	2.53	2.77
A8UF	10	3.10	2.75	2.80	2.80	15	3.23	2.63	2.40	2.70
A8RM	10	2.35	2.50	2.80	2.50	15	2.47	2.60	2.50	2.47
A8RF	10	3.50	3.20	3.35	3.30	15	2.87	2.37	2.70	2.63
A11UM	10	3.20	2.95	2.50	3.30	15	2.73	2.87	2.47	2.67
A11UF	10	3.40	3.10	2.35	2.80	15	3.53	3.47	3.13	3.23
A11RM	10	2.35	2.30	2.00	2.50	15	2.00	1.93	1.93	2.23
A11RF	10	3.00	2.70	2.80	2.65	15	2.67	2.30	2.40	2.27
D8UM	10	1.25	1.45	1.25	1.45	15	1.23	1.33	1.43	1.37
D8UF	10	2.05	1.75	1.70	1.95	15	2.00	1.87	1.70	1.80
D8RM	10	1.70	1.80	1.95	1.55	15	1.37	1.53	1.43	1.53
D8RF	10	2.35	2.00	2.20	2.35	15	1.97	1.97	2.17	1.90
D11UM	10	1.35	1.50	1.10	1.30	15	1.33	1.43	1.10	1.50
D11UF	10	1.95	1.70	1.60	1.55	15	1.93	1.87	1.60	1.70
D11RM	10	1.05	1.10	1.60	1.10	15	1.50	1.53	1.67	1.60
D11RF	10	2.35	2.00	2.20	2.35	15	2.37	2.53	2.07	2.13
Approved	80	2.98	2.81	2.69	2.83	120	2.76	2.62	2.51	2.62
Disapproved	80	1.76	1.66	1.70	1.70	120	1.71	1.76	1.65	1.69
Eight	80	2.40	2.30	2.37	2.34	120	2.21	2.14	2.11	2.15
Eleven	80	2.33	2.17	2.02	2.19	120	2.26	2.24	2.05	2.17
Urban	80	2.40	2.27	2.03	2.24	120	2.32	2.28	2.05	2.22
Rural	80	2.33	2.20	2.36	2.29	120	2.15	2.10	2.11	2.10
Male	80	2.02	2.07	2.01	2.06	120	1.90	2.00	1.88	2.02
Female	80	2.71	2.40	2.38	2.47	120	2.57	2.38	2.27	2.30
AU						60	3.02	2.94	2.63	2.84
DU						60	1.63	1.63	1.46	1.59
AR						60	2.50	2.30	2.38	2.40
DR						60	1.80	1.89	1.83	1.79

* A = approved, D = disapproved; 8 = grade 8, 11 = grade 11; R = rural, U = urban; M = male, F = female

Table 2.4

Analyses of Variance and Covariance for STEP Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Had Been Studied Intensively - (Intensives)

Source	df	IQs	STEP Scores Reading		STEP Scores Writing		STEP Scores Social Studies		STEP Scores Science		STEP Scores Mathematics	
		Anova Fs	Anova Fs	Anacova Fs	Anova Fs	Anacova Fs	Anova Fs	Anacova Fs	Anova Fs	Anacova Fs	Anova Fs	Anacova Fs
1 - Behavior	1	15.39 **	39.24 **	22.58 **	20.19 **	9.36 **	26.32 **	12.76 **	16.99 **	11.39 **	30.29 **	15.01 **
2 - Grade	1	0.02	1.72	2.03	2.37	2.48	36.26 **	40.72 **	47.62 **	46.01 **	4.38 *	4.87 *
3 - Sex	1	4.77 *	4.47 *	2.03	15.60 **	10.83 **	0.06	1.18	3.20	3.62	3.85	8.81 **
1 x 2	1	1.21	0.18	0.67	0.09	0.47	0.30	0.02	0.17	0.16	0.01	0.33
1 x 3	1	0.58	0.03	0.01	0.01	0.06	0.60	0.28	0.86	0.89	0.01	0.05
2 x 3	1	1.00	0.12	0.01	0.14	0.54	0.01	0.24	0.01	0.06	0.01	0.21
1 x 2 x 3	1	0.03	1.52	1.50	0.54	0.72	0.77	0.74	1.55	1.29	0.08	0.16
Within Mean Square	72[a]	85.77	69.77	63.21	74.53	67.45	77.11	67.54	48.98	48.80	48.27	41.20

** Significant at .01 level

* Significant at .05 level

[a] 71 for Anacova

Analyses of Variance for STEP Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Were Not Studied Intensively - (Nominees)

Source	df	STEP Scores Reading Fs	STEP Scores Writing Fs	STEP Scores Social Studies Fs	STEP Scores Science Fs	STEP Scores Mathematics Fs
1 - Behavior	1	35.66 **	43.16 **	48.75 **	45.83 **	37.06 **
2 - Grade	1	4.24 *	0.01	65.95 **	45.28 **	9.46 **
3 - Sex	1	1.23	4.61 *	2.03	6.45 *	12.40 **
1 x 2	1	0.04	0.01	0.59	1.40	2.20
1 x 3	1	0.16	1.15	0.01	1.40	0.24
2 x 3	1	0.25	0.01	0.45	0.64	0.02
1 x 2 x 3	1	3.54	2.53	3.33	0.96	2.74
Within Mean Square	152	113.00	72.98	89.16	61.03	55.56

** Significant at .01 level

* Significant at .05 level

Table 2.6

Means for STEP Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior

			Intensives						Nominees				
Group	N	IQ	Reading	Writing	Social Studies	Science	Mathematics	N	Reading	Writing	Social Studies	Science	Mathematics
A8M	10	110.70	50.20	36.40	56.60	46.40	33.30	20	46.05	35.75	54.70	43.15	32.80
A8F	10	115.30	52.20	44.70	52.70	40.10	30.50	20	50.90	42.25	54.40	41.70	31.35
A11M	10	109.80	51.80	34.70	41.80	32.90	30.60	20	51.50	37.85	43.15	33.60	29.55
A11F	10	111.10	57.10	41.60	41.70	30.70	27.00	20	51.70	40.05	39.40	31.70	23.85
D8M	10	98.30	36.70	29.70	42.20	35.90	25.20	20	39.50	30.40	45.95	36.00	26.40
D8F	10	106.90	43.90	35.20	44.80	36.40	21.80	20	36.70	29.70	40.00	29.20	19.90
D11M	10	102.80	41.30	24.00	33.00	27.60	21.30	20	39.30	28.35	31.25	26.95	22.75
D11F	10	106.40	42.60	33.80	32.50	24.40	18.90	20	44.50	31.95	32.75	24.55	19.80
A	40	111.73	52.63	39.35	48.20	37.53	30.35	80	50.04	38.98	47.91	37.54	29.39
D	40	103.60	41.13	30.68	38.13	31.08	21.80	80	40.00	30.10	37.49	29.18	22.21
8	40	107.80	45.75	36.50	49.08	39.70	27.70	80	43.29	34.53	48.76	37.51	27.61
11	40	107.53	48.20	33.53	37.25	28.90	24.45	80	46.75	34.55	36.64	29.20	23.99
M	40	105.40	45.00	31.20	43.40	35.70	27.60	80	44.09	33.09	43.76	34.93	27.88
F	40	109.93	48.95	38.83	42.93	32.90	24.55	80	45.95	35.99	41.64	31.79	23.73

A = approved, D = disapproved; 8 = grade 8, 11 = grade 11; R = rural, U = urban; M = male, F = female

Table 2.7

Analyses of Variance and Covariance for Rank in Graduating Class of Youngsters Who Were First Identified in Grade Nine as Displaying Approved or Disapproved Behavior

Source	Intensives - F Ratios					Nominees - F Ratios		
	df	Anova For IQs	Anova For Ranks	Anova For Arcsin	Anacova for Arcsin	df	Anova For Ranks	Anova For Arcsin
1 - Behavior	1	18.73 **	43.82 **	43.46 **	20.06 **	1	60.53 **	56.59 **
2 - Location	1	4.75 *	0.99	1.29	0.04	1	6.10 *	4.45 *
3 - Sex	1	0.01	5.73 *	5.88 *	9.30 **	1	3.29	3.65
1 x 2	1	0.29	0.27	0.37	0.13	1	1.58	1.52
1 x 3	1	1.35	0.82	0.86	0.08	1	4.36 *	4.27 *
2 x 3	1	1.54	0.35	0.14	1.88	1	0.53	0.51
1 x 2 x 3	1	0.94	0.11	0.32	0.01	1	0.46	0.68
Within Mean Square	56[a]	163.75	634.55	0.09	0.06	32	391.11	0.06

** Significant at .01 level

* Significant at .05 level

[a] 55 for Anacova for Intensives

Table 2.8

Means for Rank in Graduating Class of Youngsters Who Were First Identified in Grade Nine as Displaying Approved or Disapproved Behavior

	Intensives			Nominees	
Group	N	IQs	Rank	N	Rank
AUM	8	117.50	66.00	5	63.40
AUF	8	114.50	69.50	5	61.40
ARM	8	123.63	63.00	5	86.40
ARF	8	118.88	78.25	5	85.00
DUM	8	95.13	13.25	5	13.80
DUF	8	105.75	32.38	5	29.40
DRM	8	110.88	21.00	5	12.60
DRF	8	107.38	43.38	5	45.80
A	32	118.63	69.19	20	74.05
D	32	104.78	27.50	20	25.40
U	32	108.22	45.28	20	42.00
R	32	115.19	51.41	20	57.45
M	32	111.78	40.81	20	44.05
F	32	111.63	55.88	20	55.40
AM				10	74.90
AF				10	73.20
DM				10	13.20
DF				10	37.60

*A = approved, D = disapproved; R = rural, U = urban;
M = male, F = female

Table 2.9

Analyses of Variance and Means For Teacher Grades, STEP Scores, and Rank in Graduating Class for High and Low Glueck Scale Scorers

		Teacher Grades					STEP Scores						Out of School Ss - Original 9th Graders	
Source	df	English	Science	Mathematics	Social Studies	df	Reading	Writing	Social Studies	Science	Mathematics	df	Rank	Arcsin
1 - Glueck	1	12.35 **	10.33 **	5.23 *	11.45 **	1	11.53 **	8.87 **	5.76 *	5.35 *	5.14 *	1	15.05 **	14.05 **
2 - Sex	1	16.21 **	2.53	3.88	3.01	1	1.42	15.09 **	0.02	3.93	5.92 *	1	3.26	3.22
1 x 2	1	0.41	0.01	0.02	0.27	1	0.36	1.84	0.07	0.01	1.37	1	0.70	0.59
Error Mean Square	193	99.65	102.46	101.74	109.76	108	106.45	81.60	126.26	83.00	59.82	93	910.47	0.14
Group	N	Mean	Mean	Mean	Mean	N	Mean	Mean	Mean	Mean	Mean	N	Mean	
Lo. Gl. M	56	2.29	2.30	2.09	2.38	35	46.23	31.26	42.80	36.43	27.66	31	55.03	
Lo. Gl. F	67	2.80	2.52	2.39	2.57	40	49.38	39.53	43.50	33.10	25.30	33	69.79	
Hi. Gl. M	39	1.68	1.81	1.77	1.77	18	40.50	28.44	38.00	32.33	26.06	17	35.41	
Hi. Gl. F	35	2.37	2.06	2.03	2.13	19	41.16	31.79	37.53	28.74	20.05	16	39.31	
Lo. Glueck	123	2.57	2.42	2.25	2.48	75	47.91	35.67	43.17	34.65	26.40	64	62.64	
Hi. Glueck	74	2.01	1.93	1.89	1.94	37	40.84	30.16	37.76	30.49	22.97	33	37.30	
M	95	2.04	2.10	1.96	2.13	53	44.28	30.30	41.17	35.04	27.11	48	48.08	
F	102	2.65	2.36	2.26	2.42	59	46.73	37.03	41.58	31.69	23.61	49	59.84	

** Significant at .01 level

* Significant at .05 level

M = male, F = female; Hi.= high, Lo.= low; Gl.= Glueck

Table 2.10

Analyses of Variance and Means for Teacher Grades, STEP Scores, and Rank in Graduating Class For High and Low KD Scale Scorers

		Teacher Grades					STEP Scores						Out of School Ss - Original 9th Graders	
Source	df	English	Science	Mathematics	Social Studies	df	Reading	Writing	Social Studies	Science	Mathematics	df	Rank	Arcsin
1 - KD	1	0.48	1.77	1.35	2.63	1	4.31 *	1.07	0.77	0.76	2.87	1	29.56 **	27.55 **
2 - Sex	1	17.70 **	3.72	5.06 *	4.45 *	1	2.17	16.14 **	0.01	4.06 *	4.77 *	1	6.03 *	5.84 *
1 x 2	1	0.29	3.57	4.14 *	3.78	1	3.84	7.10 **	4.20 *	7.73 **	4.87 *	1	3.52	3.04
Error Mean Square	193	105.91	105.05	101.60	112.75	108	109.87	83.32	127.18	80.75	59.16	93	783.93	0.12
Group	N	Mean	Mean	Mean	Mean	N	Mean	Mean	Mean	Mean	Mean	N	Mean	
Hi. KD M	44	1.94	1.84	1.70	1.83	23	39.61	26.52	39.61	33.04	23.78	23	26.30	
Hi. KD F	57	2.64	2.39	2.32	2.44	32	46.53	38.22	44.34	34.44	23.88	27	50.67	
Lo. KD M	51	2.13	2.32	2.18	2.38	30	47.87	33.20	42.37	36.57	29.67	25	68.12	
Lo. KD F	45	2.67	2.32	2.20	2.40	27	47.00	35.63	38.30	28.44	23.30	22	71.09	
High KD	101	2.34	2.15	2.05	2.17	55	43.64	33.33	42.36	33.85	23.84	50	39.46	
Low KD	96	2.38	2.32	2.19	2.39	57	47.46	34.35	40.44	32.72	26.65	47	69.51	
M	95	2.04	2.10	1.96	2.13	53	44.28	30.30	41.17	35.04	27.11	48	48.08	
F	102	2.65	2.36	2.26	2.42	59	46.75	37.03	41.58	31.69	23.61	49	59.94	

** Significant at .01 level

* Significant at .05 level

M = male, F = female; Hi.= high, Lo.= low

Chapter 3

Adjustment, Behavior Traits, and Contacts With Law-Enforcement Agencies of Socially Approved and Disapproved Youth

Behavior Characteristics

While there is substantial agreement that pre-delinquent and delinquent youth are inclined to exhibit aggressive and other norm-violating behavior in and out of school (Task Force on Juvenile Delinquency, 1967), there is far less agreement concerning the relationship of personal and social adjustment to delinquency. The Task Force cited a number of researches linking school misconduct specifically to delinquency and suggested that school misconduct "leads to" delinquency.

Kvaraceus also described the in-school, norm-violating behavior of pre-delinquent and delinquent youth (1966). He had previously used the findings on misconduct of delinquent youngsters to construct and validate the KD Check List and the KD Proneness Scale (1950) which are measures of a youngster's behavior, attitudes, and perceptions of his surroundings and conduct. These scales were designed for use in diagnosis or prediction of delinquent behavior.

The Gluecks reported that school misconduct characterized the delinquent (1959). They pointed out that the persistent misbehavior of the delinquent appears first in the early grades. Thus, it would appear that behavior in school can be used as a predictor of delinquency.

Adjustment

Studies of the personality and adjustment of the delinquent are far less conclusive than the studies involving delinquent or aggressive behavior per se. Some researchers have attempted to describe personality types or broad diagnostic categories which would correlate with delinquent behavior patterns (Quay, 1965, and Wirt and Briggs, 1965). Others have attempted to identify particular dimensions of personality or adjustment on which the delinquent might be found to be deviant. Quay (1965) reviewed research on the relation of adjustment and personality to delinquency and concluded that some aspects of personality difficulties in youngsters are associated with the development of delinquency later. Quay (1965) also reported a study in which he found higher levels of behavior maladjustment (psychopathy, neuroticism, emotional disturbance, and immaturity) in adjudicated delinquents than in normal youngsters.

Wattenberg (1966) discussed the problem of the common occurrence of personality adjustment disorders and social deviancy and suggested that it is most productive to define the deviant behavior of the delinquent or pre-delinquent essentially in terms of deviation from societal norms. He indicated that personality and adjustment concepts should be emphasized in the study of delinquency.

In line with Wattenberg's thinking, Kvaraceus (National Education Association, 1959) estimated that no more than 25 per cent of delinquents suffer from personal or emotional adjustment problems. He concluded (p. 55) that ".... the preponderant portion of our delinquent population consists of essentially normal.... youngsters." This, of course, does not suggest that there is no relationship between delinquency and adjustment. However, it does indicate that there may be relatively few - no more than one in four - delinquents who can profit from traditional mental health services. He also noted that in the total groups of low and middle class delinquents, the proportion of emotionally disturbed youngsters will be relatively high in the middle class and extremely low in the lower class. Kvaraceus suggested that the behavior of most delinquent youngsters is actually adjustive and socially acceptable in their culture. Thus, the behavior comes to be viewed as maladjusted purely from an outside point of view. Elsewhere, Kvaraceus suggested (1966) that "maladjusted" delinquents, while only a small number, receive a disproportionately large share of the attention of social and psychological agencies. In many cases, he feels that psychological counseling might even be irrelevant and inappropriate (National Education Association, 1959).

From the opposite point of view, several researchers suggest that maladjustment is predictive of delinquency. Stott (1960) suggested that social adjustment, as assessed at the elementary level, can be used to predict delinquency. He developed the Bristol Social Adjustment Guide and offered evidence that the scale was useful in delinquency prediction for boys. It should also be noted that many items in Kvaraceus' KD Check List reflect adjustment.

MacIver (1966) suggested that delinquent youngsters have frequently experienced severe frustration and failures which, in turn, give rise to maladjustment and delinquency. He indicated that many of these frustrations may arise from the thwarting of youthful aspirations by societal restraints, particularly in the family and in school.

It seems tenable to assume that the personal and social problems of many pre-delinquent and delinquent youth may show themselves in ways that really reflect no neuroticism or psychosis as customarily defined. Instead, the maladjustment may consist chiefly of behavior which, while out of step with middle class norms, is often quite acceptable in the youngster's social milieu. The delinquent's attitudes, perceptions, and behavior may be realistic reactions to a world which is especially frustrating to the socio-economic class of which he is a part.

Contacts with Law Enforcement Agencies

Studies of delinquency prediction characteristically use contacts with law enforcement agencies and the courts as at least one major or primary class of criteria in spite of their crudity and unreliability (Task Force on Delinquency, 1967). It has been pointed out repeatedly that many instances of delinquent behavior escape attention of the courts or law enforcement agencies (President's Commission on Law Enforcement and Administration of Justice, 1967). MacIver (1966) noted that the police and the courts really have tremendous discretionary power in apprehending, dealing with, and disposing of the cases of delinquents. Nevertheless, contacts with law enforcement agencies constitute a kind of delinquency criterion which seems to have substantial face and logical validity.

Studies of Delinquency Prediction

The Task Force on Juvenile Delinquency concluded that prediction is an essential prerequisite to crime and delinquency prevention or control programs. The Task Force went on to point out that prediction systems developed on one sample must be checked out over time on a new sample.

Wattenberg (1966) pointed out that while it is commonly assumed that social deviancy or delinquency at one age level usually leads to delinquency or crime at later stages in the life of the individual, there has been very little systematic study of the long-range development of delinquent behavior. The present research has been designed, in part, to remedy this deficiency.

Design of the Current Study

In 1964 a first follow-up study was undertaken of the school achievement, health, and contacts with law enforcement agencies of the children who had been nominated in 1961 and 1962 and studied intensively in 1962 and 1963 (Feldhusen, Thurston, and Benning, 1965). In 1965 a second follow-up study was undertaken to determine the levels of personal and social adjustment, frequency of behavior problems, and frequency of contact with law enforcement agencies of youngsters who had been nominated in 1961 or 1962 as displaying socially approved behavior as compared to youngsters who had been nominated in 1961 or 1962 as displaying socially disapproved behavior. The details of the original nomination procedure, the intensive study in 1962 and 1963, the follow-up procedures initiated in 1964, and the design of the analyses are given in Classroom Behavior: Background Factors and Psycho-Social Correlates (Thurston, Feldhusen, and Benning, 1964), and Delinquency Proneness and Classroom Behavior (Feldhusen, Thurston, and Benning, 1965). The present chapter is concerned with the following specific questions:

1. Are there differences in personal and social adjustment between the following groups?
    A. Children whose behavior at the time of nomination in 1961 or 1962 was socially approved and children whose behavior was socially disapproved.

B. Boys and girls.

C. Urban and rural youngsters.

D. Eighth and eleventh graders.

E. High and low delinquency prone youngsters according to the Glueck Scales and according to the KD Proneness Scale.

2. Are there differences between the children who had been nominated in 1961 or 1962 as displaying socially approved or disapproved behavior in behavior problems in 1965 as indicated by teacher ratings? Are there differences in ratings by sex, by grade, by home location?

3. Are there differences between the children nominated in 1961 or 1962 as socially approved or disapproved in number of contacts with law enforcement agencies after five years? Are there differences in the frequency of these contacts by sex, by grade, by home location?

4. Are there differences between the children who were nominated in 1961 or 1962 as approved or disapproved in terms of their remaining in or dropping out of school after five years? Are there differences by sex, by grade, by home location?

5. Are there differences between high and low delinquency prone youngsters in frequency of police and sheriff contacts five years after the original assessment of delinquency proneness in third, sixth or ninth grade?

The analyses of social adjustment involved teacher ratings on a 1 (bad) to 10 (good) scale for the following variables:

1. popularity
2. initiative
3. leadership
4. adjustment
5. cooperation
6. appearance
7. responsibility
8. courtesy
9. integrity
10. total social adjustment

The analyses of the classroom behavior traits were done by having teachers check on a list of 18 negative traits those which the child displayed frequently (see Figure 1). The list of 18 traits was also divided into two groups of traits which yielded two scores. The following nine traits yielded a score for highly aggressive traits:

1. defiant
2. destructive
3. disrupts class
4. is a bully
5. has temper tantrums
6. overly dominant
7. talks back
8. cruel
9. fights with other pupils

The following nine traits yielded a score for low aggressive traits:

1. quarrelsome
2. sullen
3. rude
4. resentful
5. steals
6. lies
7. tardy or absent without excuse
8. profanity or obscenity
9. deceptive

The total traits score was the sum of traits checked on the list of 18.

Figure 1

EAU CLAIRE COUNTY YOUTH STUDY
BEHAVIOR RATING FORM

	Name	Negative Characteristics
-AG Name of Girl Whose Behavior is Most Approved	______	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
-AB Name of Boy Whose Behavior is Most Approved	______	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
-AG Name of Girl Whose Behavior is 2nd Most Approved	______	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
-AB Name of Boy Whose Behavior is 2nd Most Approved	______	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

LIST OF NEGATIVE CHARACTERISTICS (BEHAVIOR PROBLEMS CHECK LIST)

IRECTIONS: Circle the numbers after each name for the characteristics which are ound consistently or frequently in the behavior of each of the eight students.

1. quarrelsome
2. sullen
3. rude
4. defiant
5. resentful
6. steals
7. lies
8. destructive
9. disrupts class
10. is a bully
11. has temper tantrums
12. overly dominant
13. talks back
14. cruel
15. tardy or absent without excuse
16. profanity or obscenity
17. fights with other pupils
18. deceptive

-DG Name of Girl Whose Behavior is 2nd Most Disapproved	______	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
-DB Name of Boy Whose Behavior is 2nd Most Disapproved	______	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
-DG Name of Girl Whose Behavior is Most Disapproved	______	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
-DB Name of Boy Whose Behavior is Most Disapproved	______	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

The data on police and sheriff contacts were secured from the appropriate law enforcement agencies and were tabulated as follows:

1. One police contact
2. Two or more police contacts
3. One sheriff contact
4. Two or more sheriff contacts
5. One combined (police and sheriff) contact
6. Two or more combined contacts

The data on whether the youngster had dropped or was still in school were secured from school records.

Results will be considered significant if they reach the .05 level of significance. Both the .05 and the .01 levels of significance will be reported.

Results for Social Adjustment of Approved and Disapproved Youngsters

The results for the analyses of social adjustment of approved and disapproved children are presented in two parts, first for children who had been studied intensively ("intensives") in 1961-62 or 1962-63 and then for children who had been nominated but not studied intensively ("nominees").

Intensives

The results for the "intensives" are presented in Table 3.1. All of the F ratios for behavior for the nine social adjustment sub-scores are significant at the .01 level. The F ratio for the total social adjustment score (89.08, 1 and 176 df) is also significant at the .01 level. The means are given in Table 3.3. The means for the approved youngsters on all nine adjustment sub-scores are larger than the means for disapproved youngsters indicating significantly better adjustment ratings for approved youngsters. The means for the total adjustment scores are 70.60 and 53.00 for approved and disapproved youngsters, respectively.

All of the F ratios for sex for the nine adjustment scores are also significant at the .01 level except one which is significant at the .05 level, and the F for sex for the total adjustment score (19.07, 1 and 176 df) is significant at the .01 level. The mean total adjustment for girls, 65.88, exceeded that of boys, 57.73.

Nominees

The results of the analyses of social adjustment for the "nominees" are presented in Table 3.2. All of the F ratios for behavior for the nine adjustment sub-scores are significant at the .01 level as is the F ratio for behavior for the total adjustment score (F = 82.56, 1 and 304 df). All of the means, as reported in Table 3.3, for the nine adjustment sub-scores for approved youngsters exceed the means for disapproved youngsters. For the total adjustment score, the mean for approved youngsters, 67.61, is greater than the mean for disapproved youngsters, 53.92.

Six of the nine adjustment sub-scores produced F ratios for sex which were significant at the .01 level. The F ratio for sex for total adjustment (13.04, 1 and 304 df) is also significant at the .01 level, with means of 58.18 and 63.35 for boys and girls, respectively.

The F ratio for location for the total adjustment score was also significant at the .05 level (4.30, 1 and 304 df). The mean for urban youngsters, 62.25, exceeded that for rural youngsters, 59.28.

Results for Social Adjustment of High and Low Glueck Scorers

The analyses of social adjustment of high and low scorers on the Glueck social factor ratings for delinquency proneness and the means for these groups are given in Table 3.4. Glueck scores were available only for the "intensives." All of the F ratios for Glueck score level for the nine social adjustment sub-scores are significant at the .01 level. The F ratio for Glueck level for the total adjustment score (22.45, 1 and 217 df) is also significant at the .01 level.

For each of the nine adjustment scores, the mean for low Glueck scorers (not delinquency prone) exceeds the mean for high Glueck scorers. For total adjustment, the mean for low Glueck scorers, 65.54, exceeds the mean for high Glueck scorers, 55.33.

Five of the nine adjustment sub-scores produced F ratios for sex, which were significant at the .01 level, and one more produced an F which was significant at the .05 level. The F ratio for sex for total adjustment (9.67, 1 and 217 df) was significant at the .01 level. The means for girls for all nine adjustment sub-scores are greater than the means for boys. For total adjustment score, the mean for girls is 64.96, for boys, 58.17.

Results for Social Adjustment of High and Low KD Scorers

The results of the analyses of social adjustment for high (delinquency prone) and low scorers (non-delinquency prone) on the Kvaraceus Delinquency (KD)

Proneness Scale are presented in Table 3.5. As was the case for the Glueck scores, KD scores were only available for the "intensives." Five of the nine F ratios for social adjustment scores for KD score level are significant at the .05 level. The F ratio for total adjustment (5.82, 1 and 217 df) is also significant. All of the nine adjustment means for low KD scorers exceed the means for high scorers. For total adjustment, the mean for low KD scorers is 64.01, for high scorers, 59.52.

Eight of the nine F ratios for sex for adjustment sub-scores are significant (5 are significant at the .01 level and 3 at the .05 level) as is the F ratio for sex (significant at the .01 level) for total adjustment (12.12, 1 and 217 df). The mean for girls is 64.96, for boys, 58.17.

Four of the nine Fs for KD by sex interaction for the adjustment sub-scores are significant (2 are significant at the .01 level and 2 at the .05 level), and the F for the interaction term for total adjustment (5.49, 1 and 217 df) is also significant at the .05 level. The interaction is due to the fact that the difference between high and low KD boys is large and significant (63.07 - 53.17 = 9.90), while the difference between high and low KD girls is small and not significant (65.08 - 64.88 = 0.20).

Longitudinal Results for Classroom Behavior Problems of Approved and Disapproved Youngsters

The Behavior Problems Check List (see Figure 1), developed for use in the Eau Claire County Youth Study, was readministered to the teachers who were teaching the "intensives" and "nominees" of 1961-1962 in 1966 and 1967. A score was derived for each youngster for the number of the eighteen behavior problems checked, the total number of nine high aggressive problems checked, and for the number of low aggressive traits checked. Frequencies were then counted for the number of youngsters for whom one or more high and one or more low aggressive traits were checked and for the number for whom one or more problems were checked on the total scale of 18 problems. Chi-square analyses were run then for various two-group comparisons. These results are presented in Table 3.6.

Intensives

The frequencies for one or more high aggressive traits for approved and disapproved "intensives" are 5 and 34, respectively, and the chi-square is significant at the .01 level. For one or more low aggressive traits, the frequencies are 7 and 36 for approved and disapproved youngsters and this chi-square is also significant at the .01 level. For the total list, the frequencies of approved and disapproved children having one or more problems checked are 8 and 45, significant at the .01 level.

The sex difference for one or more high aggressive traits produced a chi-square which was significant at the .01 level. There were 28 boys and 11 girls who had one or more high aggressive problems checked.

Further analyses of differences between frequencies for one or more on the total list showed chi-squares which were significant at the .01 level for approved versus disapproved males (5 and 28), females (3 and 17), urbans (3 and 22), rurals (5 and 23), eighth graders (3 and 23), and eleventh graders (5 and 22).

Nominees

The frequencies for one or more high aggressive traits for approved and disapproved "nominees" are 25 and 55, respectively, and the chi-square is significant at the .01 level. For low aggressive traits, the frequencies are 39 and 69 for approved and disapproved youngsters, and again the chi-square is significant at the .01 level. For the total list, the frequencies are 51 and 87 for approved and disapproved youngsters, respectively, again with chi-square significant at the .01 level.

Sex differences produced significant chi-squares for one or more high aggressive and one or more of total traits checked. The frequencies for high aggressive traits were 62 and 18 for boys and girls, respectively (significant at the .01 level), and for the total list, 90 and 48 (significant at the .05 level).

All of the chi-squares for approved versus disapproved youngsters for one or more items checked by teachers on the total list were significant at the .01 level for the following groups: boys (32 and 58), girls (19 and 29), urban youngsters (14 and 54), rural youngsters (37 and 33), eighth graders (24 and 44), and eleventh graders (27 and 43). It should be noted that for approved versus disapproved rural youngsters, the seemingly small difference between the frequencies, 37 and 33, is significant because of the great difference in N between the two groups, i.e., there were 336 approved rural youngsters and 121 disapproved.

Analyses of School Dropouts

The analyses of the tendencies of approved and disapproved youngsters to drop out of school are presented in Tables 3.7 and 3.8 for "intensives" and "nominees," respectively. This data is meaningful only for the eleventh graders and graduates who would be beyond the age of compulsory attendance.

Most or all of the eighth graders would still be under the age level of compulsory attendance and hence not free to drop out of school. The several cases of dropouts reported at the eighth grade level are actually youngsters who were removed from regular eighth grade classes to be enrolled in special classes or institutions.

Intensives

For the "intensives," the frequencies of dropping out of school for approved and disapproved youngsters were 3 and 23, with chi-square significant at the .01 level. For the three grade levels, the frequencies were 3, 5, and 18 (with chi-square significant at the .01 level) for eighth and eleventh graders and graduates. The term "graduate," as used here to refer to original ninth graders in 1961 or 1962, is contradictory in that youngsters who dropped out of school could not have graduated. Thus, it would be more appropriate to say that 18 of the original ninth graders dropped out of school before completing high school.

The difference in frequency of dropping out between approved and disapproved youngsters was also significant for boys alone (3 and 14, significant at the .05 level), girls (0 and 9, significant at the .01 level), urban youngsters (0 and 6, significant at the .05 level), rural youngsters (3 and 17, significant at the .01 level), and original ninth graders who were beyond school age in 1965 (1 and 17, significant at the .01 level).

Nominees

The results for dropping out of school for "nominees" are quite similar to the results for "intensives." Since there were about twice as many approved as disapproved youngsters in the "nominee" sample, a two-to-one split of frequencies would be expected by chance. The observed frequencies were 12 and 39 for approved and disapproved youngsters. The chi-square analysis of this distribution is significant at the .01 level.

The frequencies for dropping out by grade level are 4, 18, and 29 for eighth grade, eleventh grade, and out-of-school, respectively. The chi-square is significant at the .01 level.

The differences between frequencies for approved versus disapproved youngsters for dropping out of school were all significant at the .01 level for the following groups: boys (6 and 23), girls (6 and 16), urban youngsters (2 and 22), rural youngsters (10 and 17), eighth graders (0 and 4), eleventh graders (6 and 12), and original ninth graders who were beyond school age in 1965 (6 and 23).

Longitudinal Analyses of Police and Sheriff Contact Data

The analyses of data concerning contacts with the police and sheriff departments of "intensives" and "nominees" are presented in Tables 3.7 and 3.8. The frequencies are reported for one police contact, two or more police contacts, one sheriff contact, two or more sheriff contacts, one contact for police and sheriff data combined, and two or more contacts for police and sheriff data combined.

Intensives

The frequencies for police contacts for the "intensives," as shown in Table 3.7, were 11 and 25 for one contact for approved and disapproved youngsters, respectively, and 4 and 37 for two or more contacts. The latter was significant (.01 level). For one sheriff contact, the frequencies were 1 and 18 for approved and disapproved youngsters, for two or more sheriff contacts, 0 and 3. Only the first, 1 and 18, was significant (.01 level). When the police and sheriff data were combined, the frequencies were 12 and 29 for one contact for approved and disapproved youngsters, 4 and 41 for two or more contacts. The differences between pairs in each instance was significant at the .01 level.

Further presentation of the results for police and sheriff contacts of "intensives" will be limited to that involving one and two or more contacts for these agencies combined. The difference between boys and girls was significant for one contact (28 and 13, significant at the .05 level) and two or more contacts (38 and 7, significant at the .01 level) with boys having the greater number in each case. Urban youngsters had more contacts at the two-or-more level (34 and 11, significant at the .01 level) and the differences by grade level were also significant (8, 15, and 22, significant at the .05 level) for eighth and eleventh grades and out-of-school, respectively, for two or more combined contacts.

Differences between approved and disapproved groups were also significant for one combined contact for girls (2 and 11, significant at the .05 level), urbans (9 and 17, significant at the .01 level), rurals (3 and 12, significant at the .05 level), and eighth graders (1 and 12, significant at the .01 level). The differences between approved and disapproved groups were significant for two or more combined contacts for boys (4 and 34, significant at the .01 level), girls (0 and 7, significant at the .05 level), urbans (4 and 30, significant at the .01 level), rurals (0 and 11, significant at the .01 level), eleventh graders (1 and 14, significant at the .01 level), and youngsters beyond school age (2 and 20, significant at the .01 level).

Nominees

The results relating to police and sheriff contacts for nominees are given in Table 3.8. For police contacts, the difference between approved and disapproved youngsters is significant at the .01 level for two or more contacts (25 and 79 for approved and disapproved). For sheriff contacts, only the frequencies for one contact produced a significant chi-square (3 and 13, significant at the .01 level). For combined contacts, the chi-square for one contact was significant at the .05 level with approved youngsters having a higher frequency than disapproved, 50 to 40. However, it should be noted that the Ns for approved and disapproved youngsters are 811 and 415 so that appropriately an 80 to 40 split would be expected by chance. The frequency of 50 for approved youngsters is, thus, unexpectedly low.

For two or more contacts combined, these tendencies are even more marked (26 and 85 for approved and disapproved youngsters), and the chi-square is significant at the .01 level.

The remainder of the results to be presented will focus on the combined police and sheriff data for "nominees." For one contact, the chi-squares are all significant at the .01 level for the three grade levels (19, 42, and 29, for eighth, eleventh, and out-of-school), for location (67 and 23 for urban and rural youngsters), and for sex (62 and 28 for boys and girls).

The differences between approved and disapproved "nominees" are also significant for one contact for girls (11 and 17, significant at the .01

level), rural youngsters (6 and 17, significant at the .01 level), eighth grade (9 and 10, significant at the .05 level), and eleventh grade (19 and 23, significant at the .01 level). Again it should be noted that these latter differences are significant because the Ns for approved and disapproved youngsters are in a ratio of approximately two to one in relation to one another, so by chance the frequency for approved youngsters would be twice as large as for disapproved.

For two or more combined contacts, the chi-squares are significant at the .01 level for grade level (26, 42, and 43, for eighth, eleventh, and out-of-school), location (96 and 15 for urban and rural), and sex (97 and 14 for boys and girls).

The chi-squares for approved versus disapproved "nominees" are also significant at the .01 level for boys (23 and 74 for approved versus disapproved boys), girls (3 and 11), urban youngsters (21 and 75), rurals (5 and 10), eighth graders (3 and 23), eleventh graders (10 and 32), and youngsters out-of-school (13 and 30).

High and Low Glueck Scorers

The results relating to police and sheriff contacts of high (delinquency prone) and low Glueck scorers are presented in Table 3.9. None of the chi-squares for one police contact or two or more sheriff contacts is significant. For two or more police contacts, the chi-square for high versus low Glueck score is significant at the .01 level with frequencies of 27 and 14, respectively. The chi-square for high versus low Glueck boys is significant at the .05 level (22 and 13), as is the chi-square for girls (also at the .05 level, frequencies of 5 and 1 for high and low Glueck girls, respectively).

For one sheriff contact, the chi-square for high versus low Glueck scorers was significant at the .01 level (12 and 4). The difference between high and low Glueck boys was also significant (11 and 4), but not the difference for girls (1 and 0).

For combined data for police and sheriff contacts, none of the chi-squares for high versus low Glueck scorers was significant, but for two or more combined contacts, all chi-squares were significant. There were 30 high Glueck scorers and 15 low scorers who had two or more contacts (significant at the .01 level). For the boys, there were 24 high scorers and 14 low scorers who had two or more contacts (significant at the .05 level). For girls, the frequencies were 6 and 1 for high and low scorers, respectively (significant at the .05 level).

High and Low KD Scorers

Police and sheriff contacts were also analyzed for high (delinquency prone) and low (non-delinquency prone) scorers on the KD scale. The results are presented in Table 3.10. None of the chi-squares for high versus low scorers was significant.

Discussion

The first question asked in this research was concerned with the personal and social adjustment of youngsters who, five years earlier, had been nominated as persistently displaying socially approved or disapproved classroom behavior. The results are clearcut and consistent. The youngsters whose behavior was seen by their teachers as approved in grades three or six were rated significantly higher on nine adjustment scores and for total adjustment than youngsters who were seen as exhibiting aggressive, disruptive, socially disapproved behavior.

Girls were also rated higher in adjustment than boys. Urban youngsters were rated higher than rural youngsters, but this result was not consistently supported in both samples. There were no significant differences in adjustment by grade level.

Youngsters who had been found to be delinquency prone five years earlier, according to the Glueck scales, were significantly lower in adjustment ratings than youngsters who were not delinquency prone, according to these measures. The KD Delinquency Proneness Scale had also been administered five years earlier. Youngsters who were low in delinquency proneness according to this scale were higher in adjustment according to the ratings.

These results clearly suggest that the youngster who was persistently aggressive or disruptive in grades three or six is likely to be regarded by teachers as less well adjusted in personal and social ways five years later. This is not to say that these youngsters are "neurotic" or "mentally ill." It is, however, apparent that their behavior is seen as different and as less effective than their socially approved counterparts. These ratings suggest a probable contradiction of Kvaraceus' assertion that the delinquent or pre-delinquent is essentially or most often not maladjusted. Of course, it should be noted that Kvaraceus' assertion related chiefly to the child's adjustment to his home and neighborhood environment. These ratings by teachers refer to adjustment in the school environment.

The second question was concerned with behavior problems in the classroom as observed by teachers. The Behavior Problems Check List, a list of 18 behavior problems, was completed by current teachers in 1966 and 1967 for the youngsters who had been nominated in 1961 and 1962 when they were in third or sixth grade. The problems at this later time appear much more frequently in the youngsters who were nominated originally as displaying socially disapproved behavior than in those selected because of approved behavior.

The third question of this research was concerned with the children's contacts with law enforcement agencies. Youngsters who had been nominated five years earlier as displaying socially disapproved classroom behavior were much more frequently in contact with the police and/or sheriff than approved youngsters. The older the youngsters, the more likely the contact was; urban youngsters had more contacts than rural youngsters; and boys more than girls.

The fourth question was concerned with the youngsters tendency to drop out of school. The youngsters who were nominated as displaying socially disapproved behavior were more likely to drop out of school before graduation. There was also some suggestion that rural youngsters were more likely to drop than urban youngsters in one sample, but the result was not substantiated in the second sample.

The fifth question was concerned with the frequency of police and sheriff contacts for youngsters who are high in delinquency proneness as compared with youngsters who were low in delinquency proneness. In a sense, this is a test of the predictive validity of the Glueck and the Kvaraceus (KD) scales. The results suggest clearly that the Glueck scales are predictive of delinquency as assessed five years after the original administration, while the KD scale scores were not particularly helpful in this regard.

Thus, in a variety of ways, the youngster who is identified as displaying aggressive, disruptive classroom behavior appears five years later to be beset by problems and deficiencies in functioning. As noted in the previous chapter, his school achievement is far lower than his socially approved peers. In the analyses reported in this chapter, he has been found to be rated low in personal and social adjustment, more likely to be exhibiting negative behavior traits, more likely to drop out of school, and more frequently to be in contact with the police and sheriff than his socially approved peers.

The prognosis for the youngster who persistently misbehaves in school appears sufficiently ominous to suggest the need for active and early intervention to try to head off these difficulties. The notion that these children "grow out of their problems" seems to be more wishful thinking than reality.

Summary

The results of this longitudinal study suggest that the best prediction of delinquency and other behavior problems could be made with a combination of teacher nominations and Glueck scale assessments. The results also suggest that delinquency proneness and overt delinquency are accompanied by a variety of behavior, adjustment, and learning problems which probably constitute serious and frustrating handicaps for the delinquent or delinquency prone youngster.

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Table 3.1

Analyses of Variance for Social Adjustment Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Were Studied Intensively - (Intensives)

Source	df	Popularity Fs	Initiative Fs	Leadership Fs	Adjustment Fs	Cooperation Fs	Appearance Fs	Responsibility Fs	Courtesy Fs	Integrity Fs	Total Fs
1 - Behavior	1	52.27 **	65.97 **	59.28 **	62.45 **	62.95 **	59.60 **	77.64 **	57.17 **	37.51 **	89.08 **
2 - Grade	1	0.01	2.49	1.13	0.45	0.03	4.36 *	0.23	1.54	0.30	0.26
3 - Location	1	1.58	0.01	2.96	0.11	0.06	2.11	0.52	0.01	2.21	0.31
4 - Sex	1	8.00 **	24.68 **	6.04 *	6.79 **	16.75 **	9.54 **	14.02 **	13.87 **	15.60 **	19.07 **
1 x 2	1	6.32 *	1.40	0.24	1.81	1.00	0.53	0.63	7.13 **	5.55 *	3.04
1 x 3	1	3.96 *	2.01	0.25	2.83	0.84	0.40	0.04	0.41	0.69	0.88
1 x 4	1	1.58	2.49	1.13	0.86	3.69	0.07	1.96	3.13	5.55 *	2.70
2 x 3	1	1.33	2.74	0.33	1.81	1.79	1.00	4.33 *	7.96 **	5.90 *	3.23
2 x 4	1	0.04	1.05	0.11	3.12	0.11	0.67	0.23	0.11	0.11	0.01
3 x 4	1	5.81 *	7.19 **	3.25	1.19	1.18	4.75 *	5.32 *	1.19	1.10	4.70 *
1 x 2 x 3	1	0.70	0.01	0.03	1.02	0.45	0.01	0.41	0.07	0.06	0.32
1 x 2 x 4	1	0.89	0.10	0.01	1.19	0.25	2.67	0.63	3.97 *	3.15	1.68
1 x 3 x 4	1	0.70	0.16	2.42	1.19	1.18	0.07	0.52	0.04	0.22	0.68
2 x 3 x 4	1	0.04	0.10	0.01	0.18	0.03	0.01	0.17	0.07	0.11	0.01
1 x 2 x 3 x 4	1	0.01	0.06	0.54	0.86	0.04	0.82	0.18	0.11	0.22	0.02
Within Mean Square	176	1.90	3.35	3.11	2.95	2.99	2.53	3.64	3.68	3.97	166.98

** Significant at .01 level

* Significant at .05 level

Table 3.2

Analyses of Variance for Social Adjustment Scores of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior But Who Were Not Studied Intensively - (Nominees)

Source	df	Popularity Fs	Initiative Fs	Leadership Fs	Adjustment Fs	Cooperation Fs	Appearance Fs	Responsibility Fs	Courtesy Fs	Integrity Fs	Total Fs
1 - Behavior	1	40.59 **	57.49 **	23.09 **	68.03 **	47.20 **	55.83 **	82.81 **	62.23 **	64.28 **	82.56 **
2 - Grade	1	0.89	0.16	2.06	1.04	0.29	0.17	4.78 *	1.29	0.09	0.71
3 - Location	1	2.73	1.72	6.23 *	4.76 *	1.72	0.92	2.36	2.80	3.96 *	4.30 *
4 - Sex	1	1.39	27.75 **	2.06	0.91	7.04 **	6.79 **	20.70 **	16.03 **	8.72 **	13.04 **
1 x 2	1	0.30	0.01	0.19	0.67	0.05	0.04	0.50	0.17	0.93	0.09
1 x 3	1	0.01	7.34 **	2.24	1.04	0.64	4.52 *	1.01	1.73	0.36	2.24
1 x 4	1	0.40	3.92 *	0.31	0.01	2.07	1.36	2.01	0.80	0.06	0.49
2 x 3	1	2.23	0.27	0.06	0.78	0.37	1.88	0.22	1.03	2.46	1.09
2 x 4	1	0.30	0.02	0.10	1.04	0.23	0.17	0.59	0.02	0.06	0.26
3 x 4	1	0.62	0.68	0.14	0.02	0.05	0.02	0.22	0.03	0.01	0.01
1 x 2 x 3	1	0.62	0.01	0.56	0.30	0.05	1.06	0.03	0.03	0.61	0.07
1 x 2 x 4	1	0.40	2.80	1.72	1.51	5.75 *	0.57	2.01	0.23	2.65	2.71
1 x 3 x 4	1	0.50	1.14	2.24	4.46 *	2.87	0.12	2.18	0.43	1.60	2.27
2 x 3 x 4	1	0.89	0.02	2.63	0.23	2.87	0.17	0.50	0.51	0.03	0.91
1 x 2 x 3 x 4	1	0.30	0.01	0.25	0.07	0.37	0.12	0.78	0.51	0.01	0.18
Within Mean Square	304	2.02	3.37	3.21	2.69	3.06	2.66	3.58	3.50	3.44	163.91

** Significant at .01 level

* Significant at .05 level

Table 3.3

Means for Social Adjustment Scores for Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior

Intensives

oup	N	Popularity	Initiative	Leadership	Adjustment	Cooperation	Appearance	Responsibility	Courtesy	Integrity	Total
M	12	8.08	7.58	6.67	7.67	8.00	8.75	7.92	9.00	9.08	72.75
F	12	7.92	7.67	6.83	7.92	8.42	8.75	8.00	8.67	9.00	73.17
M	12	7.17	7.17	5.67	7.08	8.08	8.58	8.25	9.08	8.92	70.00
F	12	7.67	8.17	6.33	8.00	8.33	9.00	8.75	9.58	9.08	74.92
UM	12	7.50	7.08	6.50	7.42	7.83	8.00	7.83	8.00	8.50	68.67
UF	12	7.67	7.58	6.92	8.00	8.50	8.67	8.17	8.92	9.17	73.42
RM	12	6.50	5.50	6.25	7.33	7.42	6.92	6.92	7.00	7.00	60.83
RF	12	7.25	7.50	6.42	7.25	8.25	8.92	8.58	8.08	8.08	71.08
M	12	5.33	4.42	4.33	4.25	5.08	6.92	4.75	4.83	5.42	45.33
F	12	5.67	5.17	4.67	5.42	6.08	7.00	5.42	6.67	7.17	53.25
M	12	5.17	4.42	3.25	4.92	5.33	5.92	4.92	5.50	5.33	44.75
F	12	6.92	6.75	4.92	6.92	7.42	7.50	7.25	8.00	8.42	64.08
UM	12	6.42	4.58	4.92	6.17	5.92	6.83	5.67	6.75	7.08	54.33
UF	12	6.42	5.67	4.67	5.67	6.83	6.92	6.17	7.25	8.08	57.67
RM	12	5.58	3.67	3.67	5.42	5.17	5.75	4.33	5.67	5.92	45.17
RF	12	6.75	6.42	5.50	6.25	7.17	6.58	6.50	6.92	7.33	59.42
roved	96	7.47	7.28	6.45	7.58	8.10	8.45	8.05	8.54	8.60	70.60
approved	96	6.03	5.14	4.49	5.63	6.13	6.68	5.63	6.45	6.84	53.00
nt	96	6.74	6.42	5.33	6.52	7.09	7.80	6.91	7.67	7.80	62.28
ven	96	6.76	6.00	5.60	6.69	7.14	7.32	6.77	7.32	7.65	61.32
an	96	6.88	6.22	5.69	6.56	7.08	7.73	6.74	7.51	7.94	62.32
al	96	6.63	6.20	5.25	6.65	7.15	7.40	6.94	7.48	7.51	61.28
e	96	6.47	5.55	5.16	6.28	6.60	7.21	6.32	6.98	7.16	57.73
ale	96	7.03	6.86	5.78	6.93	7.63	7.92	7.35	8.01	8.29	65.88

Nominees

	N	Popularity	Initiative	Leadership	Adjustment	Cooperation	Appearance	Responsibility	Courtesy	Integrity	Total
M	20	6.90	6.70	5.95	7.20	7.50	8.15	7.40	8.75	8.30	66.60
F	20	7.65	7.55	6.70	7.85	8.40	8.90	8.35	9.25	9.25	73.90
M	20	7.00	5.80	5.20	6.75	7.35	7.50	6.75	8.05	8.25	62.65
F	20	7.00	6.75	5.10	6.90	7.65	8.35	7.70	8.70	8.95	67.10
UM	20	7.30	7.05	6.15	7.70	8.10	8.35	7.85	8.35	8.75	71.95
UF	20	7.40	7.35	6.15	7.80	7.85	8.85	8.30	9.00	9.25	64.65
RM	20	6.90	6.10	5.70	7.40	7.60	7.75	7.50	7.65	8.05	64.65
RF	20	7.00	6.40	5.40	6.80	7.20	8.20	7.45	8.10	7.90	64.45
M	20	5.65	4.20	4.10	5.40	5.60	6.20	4.50	5.90	6.50	48.05
F	20	6.30	5.30	4.85	5.65	6.50	6.65	5.90	7.30	6.90	55.05
M	20	6.05	4.50	4.55	5.55	6.05	7.10	4.80	6.55	6.40	51.55
F	20	6.05	6.05	4.55	5.95	6.40	7.25	6.00	7.35	7.00	56.40
UM	20	6.50	4.35	5.15	6.15	6.30	6.95	5.80	6.55	6.90	54.65
UF	20	6.55	5.75	5.10	5.85	6.65	7.05	6.45	7.20	7.60	58.20
RM	20	5.85	4.15	4.20	5.15	5.30	6.50	4.80	5.75	6.20	47.70
RF	20	6.00	6.35	5.45	5.90	7.30	7.05	6.95	7.35	7.40	59.75
roved	160	7.14	6.71	5.79	7.30	7.71	8.26	7.66	8.48	8.59	67.61
approved	160	6.08	5.08	4.74	5.70	6.26	6.84	5.65	6.74	6.86	53.92
nt	160	6.54	5.86	5.13	6.41	6.93	7.51	6.43	7.73	7.69	60.16
ven	160	6.69	5.94	5.41	6.59	7.04	7.59	6.89	7.49	7.76	61.37
an	160	6.74	6.03	5.52	6.70	7.11	7.64	6.82	7.79	7.93	62.25
al	160	6.48	5.76	5.02	6.30	6.86	7.46	6.49	7.44	7.52	59.28
e	160	6.52	5.36	5.13	6.41	6.73	7.31	6.18	7.19	7.42	58.18
ale	160	6.71	6.44	5.41	6.59	7.24	7.79	7.14	8.03	8.03	63.35

= approved, D = disapproved; 8 = grade 8, 11 = grade 11; R = rural, U = urban; M = male, F = female

Table 3.4

Analyses of Variance and Means for Social Adjustment Scores of Boys and Girls Who Were High or Low in Delinquency Proneness According to the Glueck Scales

Source	df	Popularity Fs	Initiative Fs	Leadership Fs	Adjustment Fs	Cooperation Fs	Appearance Fs	Responsibility Fs	Courtesy Fs	Integrity Fs	Total Fs
1 - Glueck	1	12.95 **	13.92 **	18.82 **	20.92 **	16.33 **	15.77 **	18.04 **	15.71 **	19.61 **	22.45 **
2 - Sex	1	3.47	16.98 **	2.52	3.44	8.32 **	3.94 *	8.01 **	8.11 **	11.42 **	9.67 **
1 x 2	1	0.88	0.15	0.42	0.05	1.15	0.40	0.76	0.26	1.62	0.78
Error Mean Square	217	2.41	4.28	3.72	3.39	3.74	3.24	4.74	4.43	4.35	222.45
Group	**N**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**
Lo. Gl. M.	64	6.89	6.05	5.73	6.84	7.22	7.75	6.97	7.64	7.88	62.97
Lo. Gl. F.	72	7.13	7.11	6.01	7.35	7.75	8.11	7.60	8.33	8.54	67.82
Hi. Gl. M.	45	5.91	4.87	4.40	5.73	5.84	6.60	5.42	6.33	6.22	51.33
Hi. Gl. F.	40	6.55	6.15	5.03	6.13	6.95	7.28	6.58	7.33	7.63	59.83
Low Glueck	136	7.01	6.61	5.88	7.11	7.50	7.94	7.30	8.01	8.23	65.54
High Glueck	85	6.21	5.47	4.69	5.92	6.36	6.92	5.96	6.80	6.83	55.33
Males	109	6.49	5.56	5.18	6.39	6.65	7.28	6.33	7.10	7.19	58.17
Females	112	6.92	6.77	5.66	6.91	7.46	7.81	7.23	7.92	8.21	64.96

** Significant at .01 level

* Significant at .05 level

M = male, F = female; Hi.= high, Lo.= low; Gl. = Glueck

Table 3.5

Analyses of Variance and Means for Social Adjustment Scores of Boys and Girls Who Were High or Low in Delinquency Proneness According to the Kvaraceus Delinquency Proneness Scale

Source	df	Popularity Fs	Initiative Fs	Leadership Fs	Adjustment Fs	Cooperation Fs	Appearance Fs	Responsibility Fs	Courtesy Fs	Integrity Fs	Total Fs
1 - KD	1	6.32 *	3.75	3.37	5.49 *	4.98 *	0.85	5.72 *	3.44	5.12 *	5.82 *
2 - Sex	1	5.18 *	19.44 **	3.71	4.04 *	10.33 **	4.97 *	10.12 **	10.00 **	13.86 **	12.12 **
1 x 2	1	9.64 **	2.83	2.84	9.66 **	1.78	3.88	1.80	4.41 *	5.44 *	5.49 *
Error Mean Square	217	2.39	4.42	3.94	3.67	3.93	3.41	4.98	4.59	4.58	234.18
Group	**N**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**	**Mean**
Hi. KD M.	54	5.89	5.04	4.70	5.67	6.17	6.91	5.76	6.52	6.52	53.17
Hi. KD F.	64	6.97	6.73	5.64	7.05	7.36	7.92	7.09	8.00	8.22	64.88
Lo. KD M.	55	7.07	6.07	5.65	7.09	7.13	7.64	6.89	7.67	7.85	63.07
Lo. KD F.	48	6.85	6.81	5.69	6.75	7.60	7.67	7.42	7.94	8.21	65.08
High KD	118	6.47	5.96	5.21	6.41	6.87	7.46	6.48	7.32	7.44	59.52
Low KD	103	6.97	6.42	5.67	6.93	7.35	7.65	7.14	7.80	8.02	64.01
Males	109	6.49	5.56	5.18	6.39	6.65	7.28	6.33	7.10	7.19	58.17
Females	112	6.92	6.77	5.66	6.92	7.46	7.81	7.23	7.97	8.21	64.96

** Significant at .01 level

* Significant at .05 level

M = male, F = female; Hi. = high, Lo. = low

Table 3.6

Analyses of Behavior Problems of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior

	Intensives				Nominees			
Group	N	1 or More Hi. Aggressive Traits	1 or More Lo. Aggressive Traits	1 or More on Total Check List	N	1 or More Hi. Aggressive Traits	1 or More Lo. Aggressive Traits	1 or More on Total Check List
A8UM	16	1	0	1	67	3	2	4
A8UF	16	0	0	0	67	2	1	2
A8RM	16	0	1	1	91	9	8	12
A8RF	16	0	1	1	83	2	6	6
A11UM	16	1	1	1	65	4	4	6
A11UF	16	1	1	1	67	1	1	2
A11RM	16	1	2	2	76	3	8	10
A11RF	16	1	1	1	86	1	9	9
D8UM	16	6	5	5	47	14	14	19
D8UF	16	3	4	5	28	3	4	8
D8RM	16	8	8	9	36	8	8	10
D8RF	16	3	3	4	20	2	7	7
D11UM	16	6	5	7	45	14	15	19
D11UF	16	2	3	5	30	3	7	8
D11RM	16	5	5	7	36	7	9	10
D11RF	16	1	3	3	29	4	5	6
Approved	128	5 **	7 **	8 **	602	25 **	39 **	51 **
Disapproved	128	34	36	45	271	55	69	87
Eighth	128	21	22	26	439	43	50	68
Eleventh	128	18	21	27	434	37	58	70
Urban	128	20	19	25	416	44	48	68
Rural	128	19	24	28	457	36	60	70
Male	128	28 **	27	33	463	62 **	68	90 *
Female	128	11	16	20	410	18	40	48
AM	64	3	4	5	299	19 *	22	32
AF	64	2	3	3	303	6	17	19
DM	64	25 **	23	28	164	43 **	46	58
DF	64	9	13	17	107	12	23	29
AU	64	3	2	3	266	10	8	14 **
AR	64	2	5	5	336	15	31	37
DU	64	17	17	22	150	34	40	54
DR	64	17	19	23	121	21	29	33
A8	64	1	2	3	308	16	17	24
A11	64	4	5	5	294	9	22	27
D8	64	20	20	23	131	27	33	44
D11	64	14	16	22	140	28	36	43
AM	64	3 **	4 **	5 **	299	19 **	22 **	32 **
DM	64	25	23	28	164	43	46	58
AF	64	2	3 *	3 **	303	6 **	17 **	19 **
DF	64	9	13	17	107	12	23	29
AU	64	3 **	2 **	3 **	266	10 **	8 **	14 **
DU	64	17	17	22	150	34	40	54
AR	64	2 **	5 **	5 **	336	15 **	31 **	37 **
DR	64	17	19	23	121	21	29	33
A8	64	1 **	2 **	3 **	308	16 **	17 **	24 **
D8	64	20	20	23	131	27	33	44
A11	64	4 *	5 *	5 **	294	9 **	22 **	27 **
D11	64	14	16	22	140	28	36	43

** Significant at .01 level

* Significant at .05 level

A = approved, D = disapproved; 8 = grade eight, 11 = grade eleven; U = urban, R = rural;

M = male, F = female

Table 3.7

Analyses of Police and Sheriff Contacts and Dropping Out of School of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Were Studied Intensively - (Intensives)

Group	N	Dropped-Did Not Graduate	1 Police Contact	2 or More Police Contacts	1 Sheriff Contact	2 or More Sheriff Contacts	1 Combined Contacts	2 or More Combined Contacts
A8UM	16	0	1	1	0	0	1	1
A8UF	16	0	0	0	0	0	0	0
A8RM	16	0	0	0	0	0	0	0
A8RF	16	0	0	0	0	0	0	0
A11UM	16	0	4	1	0	0	4	1
A11UF	16	0	0	0	0	0	0	0
A11RM	16	2	1	0	0	0	1	0
A11RF	16	0	0	0	0	0	0	0
AGUM	16	0	3	2	0	0	3	2
AGUF	16	0	1	0	0	0	1	0
AGRM	16	1	0	0	1	0	1	0
AGRF	16	0	1	0	0	0	1	0
D8UM	16	0	6	3	2	0	4	5
D8UF	16	0	5	0	0	0	5	0
D8RM	16	2	1	2	1	0	2	2
D8RF	16	1	1	0	0	0	1	0
D11UM	16	0	3	8	1	0	3	8
D11UF	16	0	1	1	0	0	1	1
D11RM	16	2	2	3	6	1	6	4
D11RF	16	1	2	1	0	0	2	1
DGUM	16	3	2	12	4	0	2	12
DGUF	16	3	1	4	1	0	2	4
DGRM	16	7	0	3	2	2	1	3
DGRF	16	4	1	0	1	0	0	1
A	192	3 **	11	4 **	1 **	0	12 **	4 **
D	192	23	25	37	18	3	29	41
8	128	3	14	6	3	0	13	8
11	128	5 **	13	14 *	7	1	17	15 *
G	128	18	9	21	9	2	11	22
U	192	6 **	27 **	32 **	8	0	26	34 **
R	192	20	9	9	11	3	15	11
M	192	17	23	35 **	17 **	3	28 *	38 **
F	192	9	13	6	2	0	13	7
AM	96	3	9	4	1	0	10 *	4
AF	96	0	2	0	0	0	2	0
DM	96	14	14	31 **	16 **	3	18	34 **
DF	96	9	11	6	2	0	11	7
AU	96	0	9	4	0	0	9	4
AR	96	3	2	0	1	0	3	0
DU	96	6 *	18 *	28 **	8	0	17	30 **
DR	96	17	7	9	10	3	12	11
A8	64	0	1	1	0	0	1	1
A11	64	2	5	1	0	0	5	1
AG	64	1	5	2	1	0	6	2
D8	64	3	13	5	3	0	12	7
D11	64	3 **	8	13 *	7	1	12	14 *
DG	64	17	4	19	8	2	5	20
AM	96	3 *	9	4 **	1 **	0	10	4 **
DM	96	14	14	31	16	3	18	34
AF	96	0 **	2	0 *	0	0	2 *	0 *
DF	96	9	11	6	2	0	11	7
AU	96	0 *	9 **	4 **	0 **	0	9 **	4 **
DU	96	6	18	28	8	0	17	30
AR	96	3 **	2	0 **	1 *	0	3 *	0 **
DR	96	17	7	9	10	3	12	11
A8	64	0	1 **	1	0	0	1 **	1
D8	64	3	13	5	3	0	12	7
A11	64	2	5	1 **	0 **	0	5	1 **
D11	64	3	8	13	7	1	12	14
AG	64	1 **	5	2 **	1 *	0	6	2 **
DG	64	17	4	19	8	2	5	20

** Significant at .01 level * Significant at .05 level

A = approved, D = disapproved; 8 = grade eight, 11 = grade eleven; U = urban, R = rural; M = male, F = female; G = graduated or dropped, in 1965; was in 9th grade in 1961 or 1962 when first nominated

Table 3.8

Analyses of Police and Sheriff Contacts and Dropping Out of School of Eighth and Eleventh Grade Youngsters Who Were First Identified in Grades Three and Six as Displaying Approved or Disapproved Behavior and Who Were Not Studied Intensively - (Nominees)

Group	N	Dropped-Did Not Graduate	1 Police Contact	2 or More Police Contacts	1 Sheriff Contact	2 or More Sheriff Contacts	1 Combined Contacts	2 or More Combined Contacts
A8UM	67	0	7	2	0	0	7	2
A8UF	67	0	2	1	0	0	2	1
A8RM	91	0	0	1	0	0	0	0
A8RF	83	0	0	0	0	0	0	0
A11UM	65	0	12	5	0	0	12	5
A11UF	67	0	1	0	0	0	1	0
A11RM	76	3	2	2	1	2	3	4
A11RF	86	3	2	1	1	0	3	1
AGUM	88	1	16	12	1	0	17	12
AGUF	91	1	5	1	0	0	5	1
AGRM	15	2	0	0	0	0	0	0
AGRF	15	2	0	0	0	0	0	0
D8UM	47	0	7	16	3	0	6	18
D8UF	28	2	3	1	0	0	3	1
D8RM	36	2	2	2	2	0	1	3
D8RF	20	0	0	1	0	0	0	1
D11UM	45	1	3	25	1	0	3	25
D11UF	30	3	5	2	0	0	5	2
D11RM	36	7	9	3	2	1	8	5
D11RF	29	1	5	0	2	0	7	0
DGUM	63	10	4	22	2	0	4	22
DGUF	57	6	2	7	0	0	2	7
DGRM	12	3	0	0	1	1	1	1
DGRF	12	4	0	0	0	0	0	0
A	811	12 **	47	25 **	3 **	2	50 *	26 **
D	415	39	40	79	13	2	40	85
8	439	4	21	24	5	0	19	26
11	434	18 **	39	38 **	7	3	42 **	42 **
G	353	29	27	42	4	1	29	43
U	715	24	67 **	94 **	7	0	67 **	96 **
R	511	27	20	10	9	4	23	15
M	641	29	62 **	90 **	13 *	4	62 **	97 **
F	585	22	25	14	3	0	28	14
AM	402	6	37 **	22 **	2	2	39 **	23 **
AF	409	6	10	3	1	0	11	3
DM	239	23	25	68 **	11	2	23	74 **
DF	176	16	15	11	2	0	17	11
AU	445	2 *	43 **	21 **	1	0	44 **	21 *
AR	366	10	4	4	2	2	6	5
DU	270	22	24	73 **	6	0	23	75 **
DR	145	17	16	6	7	2	17	10
A8	308	0	9	4	0	0	9	3
A11	294	6 **	17 **	8 **	2	2	19 **	10 **
AG	209	6	21	13	1	0	22	13
D8	131	4	12	20	5	0	10	23
D11	140	12 **	22 **	30	5	1	23 **	32
DG	144	23	6	29	3	1	7	30
AM	402	6 **	37	22 **	2 **	2	39	23 **
DM	239	23	25	68	11	2	23	74
AF	409	6 **	10 **	3 **	1	0	11 **	3 **
DF	176	16	15	11	2	0	17	11
AU	445	2 **	43	21 **	1 *	0	44	21 **
DU	270	22	24	73	6	0	23	75
AR	366	10 **	4 **	4	2 **	2	6 **	5 **
DR	145	17	16	6	7	2	17	10
A8	308	0 **	9 *	4 **	0 **	0	9 *	3 **
D8	131	4	12	20	5	0	10	23
A11	294	6 **	17 **	8 **	2	2	19 **	10 **
D11	140	12	22	30	5	1	23	32
AG	209	6 **	21	13 **	1	0	22	13 **
DG	144	23	6	29	3	1	7	30

** Significant at .01 level * Significant at .05 level

A = approved, D = disapproved; 8 = grade eight, 11 = grade eleven; U = urban, R = rural; M = male, F = female; G = graduated or dropped out in 1965, was in 9th grade in 1961 or 1962 when first nominated.

Table 3.9

Chi-Square Analyses of Police and Sheriff Contacts Through June, 1967, of Youngsters Who Were High and Low in Delinquency Proneness When Rated With Glueck Scales in 1961 or 1962

Group	N	1 Police Contact	2 or More Police Contacts	1 Sheriff Contact	2 or More Sheriff Contacts	1 Combined Contact	2 or More Combined Contacts
Hi. Glueck	155	12	27 **	12 **	3	14	30 **
Lo. Glueck	229	23	14	4	0	23	15
Hi. Gl. Boys	85	9	22 *	11 *	3	12	24 *
Lo. Gl. Boys	107	13	13	4	0	13	14
Hi. Gl. Girls	70	3	5 *	1	0	2	6 *
Lo. Gl. Girls	122	10	1	0	0	10	1
Boys	192	22	35 **	15 **	3	25 *	38 **
Girls	192	13	6	1	0	12	7
Hi. Gl. Boys	85	9	22 **	11 *	3	12 *	24 **
Hi. Gl. Girls	70	3	5	1	0	2	6
Lo. Gl. Boys	107	13	13 **	4	0	13	14 **
Lo. Gl. Girls	122	10	1	0	0	10	1

** Chi-square significant at .01 level

* Chi-square significant at .05 level

Hi. = high, Lo. = low; Gl. = Glueck

Table 3.10

Chi-Square Analyses of Police and Sheriff Contacts Through June, 1967, of Youngsters Who Were High and Low in Delinquency Proneness According to Their Scores on the KD Proneness Scale

Group	N	1 Police Contact	2 or More Police Contacts	1 Sheriff Contact	2 or More Sheriff Contacts	1 Combined Contact	2 or More Combined Contacts
High KD	158	19	19	9	2	19	22
Low KD	226	16	22	7	1	17	23
Hi. KD Boys	71	11	17	9	2	11	20
Lo. KD Boys	121	11	18	6	1	14	18
Hi. KD Girls	87	8	2	0	0	8	2
Lo. KD Girls	105	5	4	1	0	4	5
Boys	192	22	35 **	15 **	3	25 *	38 **
Girls	192	13	6	1	0	12	7
Hi. KD Boys	71	11	17 *	9 **	2	11	20 **
Hi. KD Girls	87	8	2	0	0	8	2
Lo. KD Boys	121	11	18 *	6	1	14	18 *
Lo. KD Girls	105	5	4	1	0	4	5

** Chi-square significant at .01 level

* Chi-square significant at .05 level

Hi. = high, Lo. = low; KD = Kvaraceus Delinquency Proneness Scale Score

Chapter 4

Remedial Reading-Preventive Program
School Achievement and Behavior

Inadequate accomplishments in school, lack of interest and goals, classroom misbehavior, truancy, school dropout, and delinquency are related problems (Healy and Bronner, 1926; Healy and Bronner, 1936; Kvaraceus, 1945; Glueck and Glueck, 1950; Powers and Witmer, 1951; Wattenberg, 1960; Shanley, 1964; Thurston, Feldhusen, and Benning, 1964; Feldhusen, Thurston, and Benning, 1965; Polk, 1965).

One area of school achievement, reading, has held considerable research interest in recent years because of its strong relationship to classroom behavior, school problems, and delinquency, as well as with success in almost every school subject. The relationship among reading retardation, dropping out of school, and delinquency is so common that it is sometimes referred to as the "delinquency triad" (Roman, 1957). In describing the dynamics of reading achievement and adequate adjustment, Harris (1960) emphasized that the frustration of continual failure leads to the child's developing protective devices, e.g., inconspicuousness or annoying behavior. These protective measures contribute to the establishment of a "vicious cycle" wherein maladaptive behavior establishes circumstances which are likely to cause further maladaptive behavior, and so forth.

While estimates of reading retardation cases in the general school population are generally around 10 per cent (Traxler, 1941; Fabian, 1954), the incidence of reading disability among delinquents and pre-delinquents is reported as being much higher. Fabian (1954) found an 83 per cent rate of reading disability in a sample of pre-delinquent and delinquent children; and Roman (1957), in a survey conducted at a children's court, found that 84 per cent of the cases carried by the treatment clinic suffered from reading retardation along with personality and behavior problems.

Intelligence

In the several studies to follow, investigations have been undertaken regarding intelligence as a factor in reading achievement and disapproved behavior, both in-school and out-of-school. Scarpetti (1964) compared sixth grade "good" boys and "bad" boys, as nominated by their teachers, and found that the "bad boys" had a significantly lower intelligence quotient, were at least one year below their grade level in reading and arithmetic achievement, and were more frequently known by the police or courts.

Powell and Bergen (1962) reported that nonconforming, urban high school boys, who had records of disruptive and socially disapproved school behavior, were achieving at significantly lower levels in reading than conforming boys. Since the groups were matched according to IQ, the difference could not be attributed simply to differences in mental ability.

"Low morale" youngsters studied by Kvaraceus (1961) who were serious discipline problems in school or on the playground had lower IQs and were frequently low in reading ability. Kvaraceus suggested that reading disability may be either cause or effect in relation to "low morale" behavior.

In Phase II of the Eau Claire County Youth Study (Feldhusen, Thurston, and Benning, 1965), reading and arithmetic achievement of the children whose classroom behavior was evaluated as socially disapproved was found to be lower than that of the approved children. Although the mean IQ score of the disapproved children was below that of the approved children, it was also found in analyses using IQ as a covariate, the children whose classroom behavior was socially disapproved were achieving at lower levels in both reading and arithmetic than the children whose classroom behavior was socially approved.

Erickson, Scott, and Empey (1965) summarized several studies of intelligence as related to school dropout and delinquency and concluded that most dropouts and delinquents alike have the capacity to survive in school but still do not perform as well as other children.

Liddle (1963) reviewed research on delinquency in relation to intelligence and concluded that even though, on the average, the delinquent population is somewhat on the low side (intelligence test scores of delinquents average in the neighborhood of 90) with higher scores on the performance than the verbal sections, large numbers of delinquents have above average scores, and a majority have normal intelligence. In describing the Quincy Study, with which he was associated, Liddle reported that IQ tests given to teenagers who were delinquent or later became delinquent showed that more than eighty per cent had below average scores. The IQ scores of these same youngsters while in grade school, however, had been more nearly normal.

These studies of intelligence suggest that many delinquent or potentially delinquent children, while having IQ scores generally lower than those of their more approved agemates, have abilities high enough to be successful in school but yet are not able to achieve at adequate levels. The condition seems to worsen as the child grows older - the downward spiraling consequence of prolonged failure. Somewhere success must intervene in this "vicious cycle."

Self-concept; interpersonal relationships; and anxiety

Potential and actual delinquents also seem to differ from non-delinquents in their self-concepts, relationships with others, and levels of anxiety. Reckless, Dinitz, and Murray (1956) found that delinquents had a much more negative view of self than did non-delinquents. They attributed this chiefly to deficiencies in the home background factors of love, support, and harmony. Reckless, Dinitz, and Kay (1957) also reported that, even in areas of high delinquency in city slums, a majority of the adolescents do not become delinquent. Non-delinquents were found to have a more positive self-picture than delinquents. The Gluecks (1962) have also reported a number of self-conceptions which characterize the delinquency prone child - seeing the self as not wanted, feeling unloved, insecure, unappreciated, not taken seriously, and isolated. In a study of the "delinquent boy," the "corner boy," and the "college boy" in his study, Scarpetti (1965) also found that the "delinquent boy" had a poor image of himself.

Piers and Harris (1964) reported on the construction of a new self-concept instrument, the Piers-Harris Self-Concept Scale. Positive but low correlations were found between self-concept scores on it and IQ and achievement with third and sixth graders. Piers,[1] in a later study using a shorter version of the Piers-Harris Self-Concept Scale with fourth and sixth graders,

[1] Piers, Ellen V. Personal communication. June 30, 1965.

found that ability and school achievement scores correlated only moderately with self-ratings, but substantially with teacher and peer ratings. This suggests that a child's academic status affects the general impression he makes on teachers and peers a good deal more than it does his own self-attitudes. Related studies with school children show, in general, that positive self-concepts correlate low and negatively with anxiety and positively with achievement, sociometric status and teacher ratings (Lipsitt, 1958; Coopersmith, 1959; and Horowitz, 1962).

Liddle (1963) suggested that it may be school failure which contributes much to the negative view of self which characterizes the delinquent. Along with this, he reported that in the Quincy study the grade-school children who later became delinquent were generally not highly regarded by their teachers. On a sociometric instrument, 87 per cent of the children who eventually became delinquent had below average leadership scores at this earlier time.

Bowman and Matthews (1960) found in the Quincy Youth Development Project that dropouts were not differentiated from the controls by the sociometric choices of their peers or the ratings of their teachers in the sixth grade. At the ninth grade level, peers and teachers saw the potential dropout as lacking leadership qualities. In addition, students saw their potential dropout classmates as lacking friendship qualities. Teachers saw some of the potential dropouts as aggressive. Tiegland and others (1966) found that underachieving fourth graders, regardless of sex, are selected less frequently by their peers and have a lower level of personality adjustment than their classmates.

The relationship of anxiety and disapproved behavior has also been an area of research interest. Two researchers recently found lower anxiety levels in delinquent youngsters. Pierson and Kelley (1963a) reported below normal anxiety in a sample of male delinquents. The same authors (1963b) reported a second order factor of low anxiety coupled with high extraversion to be characteristic of a sample of 850 delinquents.

Remedial Reading-Preventive Programs

In his summary of a review of reading and delinquency, Liddle (1963) concluded that reading disability, a serious symptom of something wrong in a child's life, probably becomes a factor leading toward delinquent behavior and that children of low ability and/or cultural handicaps must, early in their lives, be able to succeed in school if the development of attitudes leading toward delinquent behavior are to be averted. Wattenberg (1963) also described the roles the school can play. Wattenberg asserted that the child's need for success can be managed in the school and that through this the child may be kept from the ranks of the delinquent.

There is a paucity of research on programs (both in-school and out-of-school programs) designed to help potential or actual delinquents through increasing their success in reading. Furthermore, it is not easy to assess the effectiveness of much of the research that has been done because (1) the reading program is often included among several other helping activities going on together in the total effort; and/or (2) the study does not include a control group or pays little attention to research design.

Murton, Faunce, and Neale (1966) reported on Project Motivation in which 28 children (grades three through six) met on a weekly, one-to-one basis with college student volunteers who were to establish friendly, helping relationships. The children, along with a control group numbering 28, had been nominated by their teachers as achieving below potential and as needing, among other things, an improved self-concept and better motivation for school. During the 8-month duration of the study, the volunteer tutors spent about 75 hours with the child engaged in home, school, neighborhood, university, and community activities. Volunteers also spent some time with parents and teachers. Sixteen of the 21 volunteers had given some help with reading, and had done so an average of five times. No effort was made to "tutor" the child in any formal sense. No strong evidence was revealed, from analysis of objective measures, that participation in Project Motivation affected the children's reading achievement, grades, or attitudes toward school. School attendance did appear to be improved; and the reactions of the parents and volunteers were decidedly favorable to the project. The project was continued with some modification on an expanded basis.

The Lane County Youth Project (1967), a youth development and delinquency prevention program for rural and small city youth in Oregon, included education among its several programs. Beginning in 1964, three senior high schools, two with junior high schools, began educational programs involving delinquency prone youth with behavior problems, relatively frequent delinquent behavior, and/or low academic achievement. One of the high schools included among its special curriculum for these youth "remedial reading (if indicated)." Control schools and "normal" schools were included in the research design. In only one high school was there any evidence that the programs reduced delinquency. Similarly, in only one high school (and not the one offering remedial reading) was there a marked gain in the mean grade point average of the experimental group.

A two-year project (1962-1964) conducted by Boston College and the Nazareth Child Study Center focused on a multidisciplinary approach to the problem of first grade failure (Cotter, 1964). The children were within the normal range of intelligence and ranged in age from 7-9. Many of the 21 in the experimental group and the eight in the control group (which was asserted to be of limited research value because of evaluation difficulties) were judged to be emotionally disturbed. Some of the children were found to have definite or suggested neurological impairment. In the experimental program emphasis was placed on group instruction in reading, arithmetic, and handwriting, with flexible grouping procedures used in the two classes, each under the direction of one teacher. No statistical tests of significance of differences between the test scores of the groups were reported. The outstanding finding reported from the achievement test data was the superior performance of the group involved in the experiment for two years. Other evidence also showed the experimental group to have achieved at a relatively high level. This led the researchers to conclude that the combination of special classes, small group instruction, and individualized curriculum were the key factors in their success. The report also stated that, in general, the children improved in attitude toward themselves and toward learning, and most forms of overt, negative behavior became relatively infrequent. The researchers recommended individualization of instruction through the use of programmed materials and establishment of special classes for potential and failing first grade children.

Staats and Butterfield (1965) reported success in reading remediation with a 14-year old, culturally deprived, delinquent boy through a program based on reinforcement principles of learning. After a four and one-half month period, the boy's reading achievement increased to the 4.3 grade level; he passed all of his courses for the first time; and his misbehaviors in school decreased to zero.

A special program, including instruction in reading and other forms of communication necessary for work and family life, for 40 slow learning ninth graders was set up as a part of the Quincy Youth Study (Liddle, 1963). As a group, the children were retarded an average of two and one-half years in reading; and most had below average scores on a test of personal adjustment. Compared with a control group which had received no special attention, members of the experimental group were absent from school only about half as often; were more likely to be graduated from high school; and were less likely to encounter trouble with the law. Both groups made equally slow improvement in their reading and in their adjustment test scores. Liddle and Long (1958) studied the possible benefits of early help and reported that a study, similar in principle and method to the one with the ninth graders, had been done with a group of first graders. No control group was used; but it was found that personal adjustment and school achievement did improve significantly in the one-year period.

Liddle (1963) also described a proposed, well-developed, long term action research program with kindergarten children. The study, scheduled to involve 150 in each the experimental and control groups, will provide for follow-up evaluations at five-year intervals.

A study reported by Strong, Pitts, and Kersey[2] investigated the relationship between participation in a Reading Improvement Program (not described) and dropouts in a selected group of junior-high school students in the District of Columbia. They found that during the second year of the Reading Improvement Program, on a city-wide basis, there was a much smaller percentage of dropouts among the retarded readers than during an earlier base year when no reading program had been available. The authors hypothesized that since the reading program had been the only common experience for all the participating schools, the special help in reading must have increased the holding power of the school during this period.

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[2] Strong, M. L., Pitts, A. W., and Kersey, L. H. Document included in personal communication with John D. Koontz, August 31, 1965.

Rosenbaum (1964) described a program initiated by the Trade Union Leadership Council in Detroit with the Delinquency Control Training Center at Wayne State University. Twelve tutors were trained and began working with 16 children from the middle grades, who were in the normal intelligence range, and whose reading abilities were not seriously impaired. Plans were made to follow these children and study the effects of the tutoring, but no results have been reported as yet.

The Boulder County Juvenile Court Demonstration Project (Boulder County, Colorado)[3] reported a tutoring program with volunteers in English, reading, and mathematics for probationers who are academic underachievers. Wilkins[4] provided information about a burgeoning after-school program in Providence, Rhode Island, part of which includes using college students in a tutorial program in reading and arithmetic with elementary school children from a

[3] Scheier, Ivan H. Personal communication. September 26, 1966.

[4] Wilkins, Ralph W. Personal communication. October 7, 1965.

low socio-economic area. Sister M. Bernetta, O.P.[5] described a tutorial reading program for culturally deprived elementary school children in Grand Rapids, Michigan. The tutors, elementary education college students, used programmed reading materials, and also participated in social activities with the children. The fourteen pupils, who were involved in the project and received 54 hours of tutoring, were reported to have improved in reading. Other projects, using older students as helpers for their younger school mates, have also been attempted (The North Carolina Advancement School, 1965,[6] and Lippitt and Lohman, 1965).

The Youth Development Project[7] was described as a three-year in-school delinquency prevention demonstration-research project with the Columbus, Ohio, public schools. Seventh grade delinquency prone boys with IQs above 70 and without severe emotional difficulties participated in special self-contained classes in which four periods per week were given to remedial reading. Control groups were also used. Data are to be reported as they become available.

Two studies of the effects of remedial reading and psychotherapy, each involving three small groups of adjudicated delinquent aggressive boys, give somewhat differing findings (Roman, 1957, and Fisher reported in Roman, 1957). In these studies three therapeutic programs were tested:

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[5] Bernetta, Sister M., O.P. Personal communication. September 9, 1965.

[6] Dodge, Lowell. Personal communication. September 20, 1965.

[7] Hall, Nason E. Personal communication. August 24, 1967.

tutorial group therapy, aimed at the simultaneous correction of reading difficulties and the improvement of mental health; group remedial reading; and interview group therapy. They were compared for their effectiveness in improving the reading abilities and social adjustment of the subjects. Roman found that the group on whom the tutorial group activities were employed improved to the greatest extent. Fisher, however, found the greatest improvement occurring in the group receiving group therapy with no remedial reading. The group which received remedial reading help with no psychotherapy improved the least in reading.

The reports of the effectiveness of the programs just reviewed suggest strongly that as yet those persons involved in planning programs aimed at the prevention and treatment of potential and/or actual delinquency through increasing children's success in reading have only modest clues to guide them. A variety of approaches have been tried. Some may be judged to have been at least moderately successful, at least as evidenced by behavioral changes in the participants or by subjective reports, if not by results on objective measures, such as tests, rating scales, etc.; other efforts appear not to have improved the children's reading ability or their behavior to any appreciable degree. For still others, no information has been reported. Thus, it seems that a great deal more study is needed before the questions connected with this aspect of delinquency prevention and treatment will be answered. While delinquency is assuredly a complex problem, and while it seems most unlikely that any single effort can prevent its occurrence or provide its cure, it is necessary to know as much as possible about each of the influences which are associated with delinquent behavior. More needs to be known about what can be done in school, during the school day, to insure the academic successes of a child before the spiraling effects of failure become irreversible and delinquent behavior becomes an entrenched element in his life.

This portion of the Eau Claire County Youth Study reports on a pilot study which investigated a tutored remedial reading program and its effects on fourth graders who were identified as being delinquency prone and retarded in reading. The remedial reading-preventive approach used in this program provided college student tutors who used programmed reading material to help children improve their reading.

Design and Procedures

Pilot Study in Remedial Reading

The remedial reading-preventive activities of the Eau Claire County Youth Study were planned and carried out to answer the following questions:

1. Can a system be developed which will provide selected college students with remedial reading instruction and counseling skills which they can use successfully as tutors with children who are delinquency prone and retarded in reading?
2. Do children who are delinquency prone and retarded in reading and who receive special tutorial instruction in reading achieve more in reading and do they show more improvement in adjustment and classroom behavior than similar children who do not receive the tutorial instruction?
3. What are the views of children, tutors, teachers, and parents concerning the values, effects, and structure of the remedial reading program which was developed?

Fourth grade children who had been identified by their third grade teachers as displaying disapproved, aggressive classroom behavior, were selected as the subjects for an experimental group. A control group of children who would receive no tutoring was also drawn. Children in both groups took a series of intelligence, reading, and other psychological tests. The experimental group then participated in a six-month period of remedial reading instruction with the help of college student tutors during the fourth grade. At the end of this period of instruction, the reading and psychological tests were readministered to both the experimental and control groups. Also, evaluation of each child's behavior was made, both before and after the tutored reading activities, by his teacher through check lists and rating scales and by his classmates through sociometric instruments. Parents, tutors, children, and teachers of the experimental group were also interviewed to secure their reactions to the remedial reading program.

Selection of Subjects

The procedures for securing nominations from the third grade teachers were essentially the same as those employed in Phase I of the Eau Claire County Youth Study. A nomination sheet, which includes the Behavior Problems Check List, was given to each third grade teacher in Eau Claire County in May, 1965, and in May, 1966 (Appendix A). On this form the teacher was instructed to nominate the two boys and the two girls whose behavior in the classroom was most socially disapproved and the two boys and the two girls whose classroom behavior was most socially approved. Each teacher also was asked to check the behavior problems which were found consistently or frequently in the behavior of each of the pupils nominated. The list of negative characteristics was: quarrelsome, sullen, rude, defiant, resentful, steals, lies, destructive, disrupts class, is a bully, has temper tantrums, overly dominant, talks back, cruel, tardy or absent without excuse, profanity or obscenity, fights with other pupils, deceptive. Each third grade teacher was also requested to provide on a data sheet the results of the most recent intelligence test which the child had taken in school and the results of the most recent reading achievement test (Appendix B). Each teacher also completed a Pupil Check List for each nominee from her room. This check list, an adaptation of the Kvaraceus Delinquency Proneness Check List,[8] required the teacher to give an estimate of each nominee's level of reading ability and the teacher's estimate of the child's probable success if he were to participate in special remedial reading instruction.

In May, 1965, nominations were received from 25 schools with 34 third grade classrooms. This resulted in a list of 115 disapproved children, 53 girls and 62 boys. The following additional selection criteria were also used: (1) a reading disability of at least one-half year below the national norms for the grade; (2) one or more negative behavior traits checked by the teacher; and (3) at least average intellectual ability as shown by the test score available from the schools.

Application of these three requirements in 1965 resulted in a pool of only 19 Ss, eleven boys and eight girls. Letters were sent to the parents requesting their willingness to permit their children to participate in the study (Appendix C). The project psychologist subsequently visited each home to explain the Youth Study further and to secure parental consent for participation in the study. Three parents did not want to have their children participate; and four others indicated that they were planning to move from the county in a short time and thus would not be available for the study. The researchers randomly selected seven of the remaining twelve children who had just completed the third grade to participate in the 1965-1966 remedial reading program. The remaining five became the control group.

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[8] Permission to adapt the Kvaraceus Delinquency Proneness Check List received from the author in 1965.

In May, 1966, nominations were received from 25 schools with 36 third grade classrooms; and this resulted in a new list of 107 disapproved children, 61 boys and 46 girls. Fifteen of these third graders fulfilled the three-way selection criteria. However, three parents did not want to have their children participate. From the remaining twelve, six were randomly selected for the experimental activities and the other six became the control group.

Thus, in all, thirteen children participated in the remedial reading programs, seven during 1965-1966 and six during 1966-1967. The total in the control group was eleven, five from the 1965 selection and six from that of 1966. The experimental and control Ss were, thus, the population of children in their school system who met the selection criteria. They are samples only in the sense that they may be representative of comparable groups in other schools.

Pretesting (Summer, 1965, and Summer, 1966)

Each child was administered the following instruments:

1. Wechsler Intelligence Scale for Children (WISC)
2. Gilmore Oral Reading Test, Form A. This individually administered test provides measures of oral reading, comprehension of material read, and rate of reading. Standard scores and grade equivalents are provided for Accuracy and Comprehension; Performance Ratings are provided for Accuracy, Comprehension, and Rate.
3. Gates Advanced Primary Reading Test, Type APR (Paragraph Reading), Form 1. This test is part of a comprehensive battery of reading tests for grades one through ten. It measures ability to read thought units with a reasonable degree of understanding. Scores are provided as raw scores, grade scores, age scores, and percentile scores.

   Gates Advanced Primary Reading Test, Type AWR (Word Recognition), Form 1. A companion test of the APR, it measures the ability to read words representative of the primary vocabulary.
4. Sarason's General Anxiety Scale.[9] This 45-item scale provides a measure of a child's anxiety in his general experience. The anxiety score is the number of items answered "yes." Eleven items are included to provide a lie scale.

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[9] Permission to use Sarason's General Anxiety Scale granted in personal communication with author, 6-28-65. Taken from Anxiety in Elementary School Children, John Wiley and Sons, New York, 1950.

5. Piers-Harris Self-Concept Scale, "The Way I Feel About Myself."[10] The 80 items of this self-report scale are answered "yes" or "no" by the child. Items are scored in the direction of high (adequate) self-concept. Factor scoring is also possible.
6. Dolch Basic Sight Vocabulary (220 words). This is an oral reading word list of 220 words. The score used in the present study is the percentage of words pronounced correctly.
7. An adaptation of the Kvaraceus Delinquency Proneness Scale - KDJRTJFF.[11] This is a screening device for use in identifying boys and girls who are delinquency prone. This modification of the KD Proneness Scale was made to permit its use with boys and girls in the fourth grade. The original form of the test was designed for pupils in grades six to twelve. The modified version was first used in Phase I of the Eau Claire County Youth Study (1964). From the original KD Proneness Scale (1953) of 75 items, 32 items were retained without change and 39 were changed in some way to make them suitable for use

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[10] Permission to use Piers-Harris Self-Concept Scale granted in personal communication with authors, June 30, 1965.

[11] Permission to adapt the Kvaraceus Delinquency Proneness Scale - KDJRTJFF, secured from publisher, Harcourt, Brace, and World, Incorporated, in 1961.

> with fourth grade children. Administration was in accordance with the usual direction of the unmodified form. High positive scores closely resemble those of delinquent groups. High negative scores resemble "high morale" groups.

Letters were sent to the parents of those children who were chosen for the experimental group asking their permission to allow their children to participate in a "program of reading improvement." (Appendix C)

Intelligence test scores obtained from school records ranged from 90-108 for the pupils in the experimental group and from 90-128 for those in the control group. The mean IQ scores were 97 and 104 for the experimental and control groups, respectively. In reading achievement, the grade equivalent scores for the pupils in the experimental group ranged from .5 to 1.3 school years below the national norms. The grade equivalent scores in reading for the control group ranged from .5 to 1.1 school years below the expected for their grade level. The number of behavior traits checked by the teachers in the spring of each year ranged from 1 to 11 for both the experimental and control groups.

Selection and Training of Tutors

Students enrolled in undergraduate psychology classes were given a brief description of the proposed remedial reading program of the Youth Study. These students were asked to submit an application to serve as a tutor if they were interested in children and in possible participation in the research (Appendix D). During the two years of the remedial reading program, 38 university students (17 for the first year; 21 for the second) submitted applications. Applicants were judged on the following bases: (1) good academic standing at the university; (2) previous experience with children; and (3) professional plans which included working with people in some capacity. Most of the 38 applicants met all these requirements. From the applicants, twelve (seven women and five men) were chosen by the researchers as tutors for the thirteen fourth graders in the experimental group. (One of the tutors worked with two pupils.) There were two sophomores, seven juniors, and three seniors. Five were enrolled in elementary education; three in secondary education; two in psychology; and one each in speech correction and social work. All but one of the tutors had experience working with children in activities such as Boy or Girl Scouting, Sunday School religious classes, camp counseling, or playground activities. It should, perhaps, be re-emphasized that these tutors had had no special background of courses in the teaching of reading or in counseling and no experience in working with retarded readers.

Five orientation and training sessions were planned for the tutors prior to their beginning to work with the fourth graders. The purposes of this series of meetings were:

1. To present the purposes and goals of the Eau Claire County Youth Study and a review of the findings of Phases I and II.
2. To promote the attitudes felt to be most desirable in a helping relationship and to encourage the tutor's personal involvement in the Youth Study.
3. To give the tutors brief instruction in the general area of

remedial reading and specifically in the use of Programmed Reading (Sullivan Associates Program, Webster Division, McGraw-Hill Book Company), the instructional material to be used.

The first session was conducted by the Director of the Youth Study; the second by the Co-Director; and the last three by the project reading consultants. The reading consultant during 1965-1966 was the Director of the University Reading-Study Center. During the 1966-1967 reading program, two elementary school coordinators from the city school district served as the reading consultants of the project. The orientation meetings were held the week prior to beginning the actual tutorial sessions with the fourth grade children.

Session 1. Discussion of the findings of Phases I and II, describing in particular the characteristics and background factors of those children who display socially disapproved behavior in the classroom.

Session 2. Discussion of general child development principles, needs, and developmental tasks of fourth graders.

Session 3. Discussion of the reading process -- word perception, meaning vocabulary, comprehension, and motivation. Discussion of problems in reading achievement -- causes, importance of success, relationship between pupil and teacher. Also, each tutor was supplied with a Teacher's Guide, placement test, reading books, and reading tests of the Programmed Reading materials.

Session 4. Introduction to the Programmed Reading materials and rationale. Reading consultant gave a demonstration lesson, including the administration of the placement test.

Session 5. Discussion of how to make the most effective use of the

Programmed Reading materials -- activities, tests, storybooks. The necessity of following the recommended procedures from the manual was stressed, while encouraging the tutor to feel free to act on his own when faced with the unforeseen problems which are inevitable in practice. Discussions included how to make the initial contact with the child; relationships with the child's teachers and parents; relationships with the reading consultant and how to receive his assistance; confidentiality of all work associated with the tutoring.

The reading consultant was readily available to assist the tutors as help was requested. The reading consultant visited each tutor at least once as he worked with the child in his school. The reading consultant also met twice with the group of tutors after they began work to discuss progress and problems. Each tutor kept a log of his activities with his pupil. These logs involving the child were especially helpful in the discussions at these meetings.

Evaluation by teacher and classmates prior to the remedial reading sessions

Prior to the tutorial reading program in the schools, the fourth grade teacher of each of the experimental and control children was asked to complete the following instruments:

1. Behavior Problems Check List - This check list of eighteen negative behavior characteristics is a part of the form used by the teachers in identifying the two boys and two girls who consistently display disapproved behavior in the classroom and the two boys and the two girls who display approved classroom behavior. The Behavior Traits score is the number of negative

characteristics checked for a pupil by his teacher.

2. Pupil Check List, an adaptation of the Kvaraceus Delinquency Proneness Check List - This is a screening device for identifying delinquency-prone boys and girls. The original scale was modified somewhat for use in the present study. In addition to a total score, scoring can also be done for personal, environmental, and school factors. The child's "score" is the number of items which have been checked "yes."
3. A teacher rating scale (Haring and Phillips)[12] - This is a 26-item scale of a child's personal and social behavior. Teacher ratings are made on a seven-point scale, with the high scores indicating acceptable, adequate behavior.
4. A teacher rating scale (Sarason)[13] - This scale provides a measure of the child's reactions to tests and classroom situations as rated by his teacher. The 17 items in this scale were derived from the same *a priori* considerations as were the items in the Test Anxiety Scale for Children, a paper and pencil questionnaire. Teacher ratings are made on a five-point scale, high scores indicating relatively little anxious behavior in the tests and classroom situations.

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[12] Teacher Rating Scale is reproduced by special permission from the book, *Educating Emotionally Disturbed Children*, Appendix C, by N. G. Haring and E. L. Phillips, copyright 1962, McGraw-Hill Book Company, Inc.

[13] Teacher Rating Scale is reproduced by special permission of author, from the book, *Anxiety in Elementary School Children*, John Wiley and Sons, New York, 1950.

Also, each teacher administered two different sociometric instruments to the class in which each of the experimental and control pupils was enrolled (Appendix E). One of the forms dealt with peer relations in a social situation, the other in a school work situation. Two scores were derived for each pupil in the class, a Social Expansiveness Index and a Social Status Index. The Social Expansiveness Index shows the degree of acceptance of his classmates by an individual, a measure of his feeling toward the group in which he finds himself. The Social Expansiveness Index is a ratio between the algebraic sum of the number of positive and negative choices made by an individual pupil and the number of pupils in his class. The Social Status Index shows the degree of acceptance of an individual by his classmates. It is a measure of the feeling of the group toward the individual. The Social Status Index is the ratio between the algebraic sum of the number of positive and negative choices toward the individual and the number of pupils in his class.

Remedial reading instruction and activities

The remedial reading sessions of the first year began during the week of October 18, 1965, and ended the last week of April, 1966. Those of the second year began the week of October 25, 1956, and ended the first week in May, 1967. Each tutor met with the fourth grade pupil for an hour twice a week. Exceptions to this schedule were occasioned by school vacation periods, the pupil's absence from school, or the tutor's inability to meet because of illness or inclement weather. The meetings were held during the school day in a place in the school building where the pupil and tutor could work privately and with minimal disturbance. The tutors met with the fourth grade pupils for an average of 39 hours each during the program.

There was wide variation in the points at which the diagnostic tests indicated that the tutor should begin the programmed reading. Five students began with Book 2; two students with Book 13; and one student each began with Book 1, 3, 4, 9, 10, and 15. There were also marked differences in the amount of programmed textbook material which was completed by the pupils in the experimental group. The number of pupils and the number of books which the student had completed, including the one in which he was working at the end of the tutorial period were: three students - eight books; two students - six books; one student - five books; one student - four books; four students - three books; and two students - two books.

In addition to the programmed textbook material and the related activities suggested in the manual, the tutors also made considerable use of the companion storybooks in their tutoring activities. Some of the tutors also gave some time to other activities, e.g., recommending and helping find other reading materials for the pupil; listening to both happy and sad experiences which pupils volunteered concerning in-school or out-of-school experiences; and providing some sort of party or game activities before holidays or at the end of the tutoring period. These activities are described in greater detail in some of the tutor reports included later in this chapter.

The administrators and teachers in all of the schools involved continued to demonstrate the same high degree of interest and cooperation that was present throughout the previous years of the Eau Claire County Youth Study. The request to allow the tutors to meet with a child in the school during the school day for an extended period was welcomed and granted without exception. In fact, the responses included comments such as: "Send us all the tutors you can;" "We think it's wonderful that someone will be available to work individually with _____ this year. It will be so good for the child."

The Co-Director of the Youth Study met with each of the school administrators at their schools prior to the beginning of the tutoring and at least once during the tutorial period to explain the project and answer questions which might have arisen. Also, the administrators and teachers were encouraged to call the researchers in the event that any questions arose regarding the remedial reading program.

Evaluation by teachers and classmates following the remedial reading program

The same series of psychological instruments that were completed by the teachers and fourth grade students in the fall prior to the remedial sessions was given again in the spring after the remedial reading program had ended. These were:

1. Behavior Problems Check List
2. Pupil Check List, an adaptation of the Kvaraceus Delinquency Proneness Check List
3. A teacher rating scale (Haring and Phillips)
4. A teacher rating scale (Sarason)
5. Two sociometric instruments

Post-testing (Summer)

The post-testing of each of the experimental and control children was accomplished during the summer following the remedial reading progam.

The tests were those, with the exception of the WISC, which each child had taken the previous summer.

Statistical Treatment

Differences between the "change scores" on all variables for the experimental and control groups were subjected to analysis of variance. The "change score" was the difference between pretest and post-test scores. For the reading achievement data analysis of covariance was also employed. In one such analysis, "change scores" were analyzed with IQ as the covariate. The mean Full Scale Wechsler IQ for the experimental group was 95.77; for the control group it was 98.45. In a second analysis of covariance, post-test scores were analyzed with pretest scores as the covariate.

Tutored Reading Evaluation

Structured interview blanks designed to elicit information about the conduct and effectiveness of the remedial reading program were prepared by the researchers. Forms were prepared for the child (24 items), the tutor (22 items), the parents (20 items), and the teachers (21 items), (Appendix F). The first 17 questions in each called for the same kinds of observations from each of the respondents. Through this procedure the reactions of the people most closely involved in the remedial reading program provided a valuable means of evaluating its effectiveness.

Results

None of the analyses of variance or covariance yielded significant F ratios. Thus, there will be no further presentation of the results related to reading achievement, adjustment, and behavior measures except to summarize descriptively the pattern of non-significant changes. The summary is given in Table 4.1. The data from which this summary was made are presented in Table 4.2.

Overview and Summary of Reactions of Children, Parents, Teacher, and Tutors to Tutored Reading Evaluation Questionnaire

As was described earlier, each child in the experimental group, his parents, his classroom teacher, and his tutor responded to a Tutored Reading Evaluation Questionnaire (See Appendix F). Although the forms for each group of respondents varied somewhat in the number of items, the first seventeen items in each blank called for the same kinds of observations. These seventeen common items provided a means for comparing the reactions of the children, parents, teachers, and tutors to the remedial reading program. This section presents: (1) the tabulations of the reactions to the questionnaires, and (2) some of the verbatim comments to the items. The items are discussed in the order in which they appear in the questionnaires.

1. Has the child improved in reading?*

	Child	Parents	Teacher	Tutor
Yes	12	10	12	13
Don't know; no response	1	3		
No			1	

The reactions to the Tutored Reading Evaluation by the persons most closely associated with the tutoring activities were, in general, that the children had shown improvement in reading. Only one teacher felt the child from her room had not improved; and three of the parents were uncertain as to whether their children had improved in reading. Without exception, each tutor felt that the child whom he had helped had improved in reading.

Comments**

Parents (Yes)

Yes, a lot.
I think so, enjoys it now.
We know he has.

Teacher (Yes)

She has advanced from a 3.7 to 5.5.
Yes - largely in vocabulary and skills rather than comprehension.

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* Questions for child addressed him directly, e.g., "Have you become a better reader?" - "Do you like to read more?," etc. The categories which are used for tabulating were not given as response choices on the questionnaire blanks. They are the ones into which the responses given seemed most closely to fit. Responses were judged by two members of the project, with a third member entering in where there was lack of agreement.

** Where the comment was more than a brief one, e.g., "Yes; No; Don't know; Slightly; Great deal," the verbatim response is given.

Comments continued

Tutor (Yes)

His approach to reading has become more enjoyable. Some of the phonic elements are more clear.
He is more fluent in his reading.
The teacher reports a somewhat improved reading ability. She is now able to sound out letter and word combinations and her overall speed is also up a small degree.
She can read more fluently and uses more expression in her dialogue.
She has improved in her consonant sounds and word endings.
He has definitely improved in his ability to sound out words, to read smoother and to read with greater confidence.
Yes, he has - he doesn't make as many little errors that he used to make.
He has more expression in his reading.
I think he has improved somewhat. Since we established the basics about vowel sounds, his entire problem greatly waned.
He has improved somewhat in his vowel discrimination, and seems to be getting better at sounding out the words.

2. Does he like to read more?

	Child	Parents	Teacher	Tutor
Yes	10	9	11	12
Don't know; no response		2	1	1
No	3	2	1	

These data indicate that, in general, the children's liking for reading was believed to have increased over the period of the tutored reading activities. Three children, however, did not feel they liked to read more than before; while two parents and one teacher felt no increase had occurred. Two of the parents and one each of the teachers and tutors were uncertain.

Comments

Parents (Yes)

When he is told to - has shown more of an interest.
Quite a bit more.

Comments continued

Teacher (Yes)

He seems to. He takes library books home and has told of reading to younger brothers and sisters.
Yes, reads more library books.
Yes, she enjoys reading.
Only that which he likes to read.
There is not much change but I am grateful for small degree of improvement.

Tutor (Yes)

Yes, through his interest in newspapers and other outside reading, his interest on his own level has increased.
Yes, he told me that before he could hardly read but now he is about the best reader in his reading class.
She seems to take a more active interest in books. The librarian reports that she now takes many more books out than she did before.
Yes. She took the book home many times and also takes library books.
Yes, she checks out library books and reads them now.
I think he has more confidence in his reading ability at certain times but continues to be interested in the first and second grade level books - where he is successful.
Yes. He enjoyed reading simple poems which we sometimes used.
I think he likes to read more now that it does not take as much effort. He has more confidence in his reading ability and seems to be more satisfied with his performance when reading aloud.
Yes, he reads many books, many of which are above his level.

(No)

He enjoyed the books I brought; but I couldn't say he likes to read more.

3. Does he read outside of school more often now?

	Child	Parents	Teacher	Tutor
Yes	9	11	8	7
Don't know; no response			2	3
No	4	2	3	3

The majority of the reactions were that the children did read more often outside of school than they had before. However, there was a lesser number of affirmative reactions noted than on the first two items of the questionnaire. Four of the children, two parents, five teachers, and six tutors were uncertain or felt that there was no increase in out-of-school reading.

Comments

Parents (Yes)

Has library books.
Yes - have readers for him.
Only when its suggested but when started he continues.
Some - once in awhile.

(No)

Not noticeable.

Teachers (Yes)

He seems to be interested in news and he reads library books.
Yes, I am led to believe so at least.
Takes many library books out but reports on only a few.

(No)

I doubt it! His sole interest is becoming a truck driver.
Mother says she sees very little change.
The same as before.

Tutor (Yes)

Many of the books taken out of the library are for home reading purposes.
Yes, she seems to read better because she takes out library books.
Yes, library books.
His teacher told me that he later began to take more school work home with him even though it hadn't been assigned. As far as his reading for leisure, I don't know.
Although Kevin has begun to read outside of class, more time with him would increase this reading.

(Don't know)

He likes handicraft books and those on trucks but nothing else.
I do not know. I've seen him with library books but they were still too hard for him to read.
I don't really know if he reads more outside of school now because he read a great deal before this.

Comments continued

Tutor (No)

No, Kurt said he never touches a book in the summer and that there are no magazines in the house that he reads. I don't think he has time to read at home with all the work he says he has to do. Reading is less work now, but is still work too.

4. Is he doing better in other subjects?

	Child	Parents	Teacher	Tutor
Yes	12	10	11	10
Don't know; no response		3		1
No	1		2	2

Reactions to this question were generally affirmative. Only one child and two each of the teachers and tutors stated that they did not believe the child had shown improvement in other school subjects over the tutorial period. Three parents and one tutor were uncertain.

Comments

Parents (Yes)

Arithmetic improved.
Better marks on card.
He did go up on report card.
Arithmetic is improving.
Just average, writing has improved, spelling has improved.
Slight improvement in most.

Teacher (Yes)

Definitely yes, in arithmetic and Language Arts.
Yes, Mary is still a very weak student but has improved. Last fall she couldn't seem to do any school work at even the easiest level. Now she tries and sometimes even volunteers answers.
She has made about a years growth in all subjects.

Comments continued

Teacher (Yes)

Neither social studies nor science has shown improvement; but arithmetic has improved.
In some such as social studies and science.
Slightly better.
At times.
Sporadically.
A little.

Tutor (Yes)

I believe so because his reading has improved - his spelling should be better.
There seems to have been an overall improvement in her general attitude toward school and this has contributed to greater achievement.
I think she is doing better in social studies and language arts - but is doing very poorly in arithmetic.
Yes, she raised her Fs and Ds to Ds and Cs which is an improvement.
Yes, his teacher told me that most of his school work had improved with his better grasp on self-confidence.
His teacher seems to think he is doing better in other classwork now because he can understand written directions better and reading holds his attention better now.
His teacher says that he is better behaved and he is doing better in his classes.
There has been somewhat of an improvement in the classroom reading. Generally, he still remains a C or D student.

(No)

No. In fact he went down in spelling and math.; for what reasons I don't know. His teacher said he doesn't try but sits back unless he's shoved. But he still seems to like school.

5. Did the special reading classes help him?

	Child	Parents	Teacher	Tutor
Yes	12	12	10	13
Don't know; no response		1	2	
No	1		1	

With few exceptions, the reactions of the children, parents, teachers, and tutors were that the special reading classes had helped the children.

Only one child and one teacher did not believe they were of help. One parent and two teachers were uncertain.

Comments

Parents (Yes)

Teacher was surprised at what he could do.

Teacher (Yes)

I am sure they have and the principal is pleased with his interest in reading.
I always feel a child likes school better if he can read. So I feel his special help class helped to make him happier in his work.
The tests indicate that they have helped her (She made the most growth in reading.).
It has given him more self-confidence.
It stimulated his interest and motivated more participation in the classroom.
Yes, I feel it helped some. Helped to create more of an interest in reading.

(No)

Apparently not in his fourth grade studies. If we were to study and discuss only trucks, he would be an A student. School does not interest him nor does he find any importance in it.

Tutor (Yes)

The special session very definitely helped Kevin improve in his social situation within the classroom.
Yes. It helped give him confidence.
They certainly did.
Yes, I suppose, but I don't think she needed the help to begin with.
I think it made her slow down and look at all of the words and be aware of the thought behind them.
Yes, his basic problem was a lack of knowledge of vowels. He had evidently missed this earlier and it is doubtful that he'd have picked up an understanding later.
The class helped him as well as his reading. It improved his opinion of himself as a reader and as a person worthy of attention.
They helped him by letting him know that someone cared enough to spend time with him.
Yes, they did. They helped him a great deal.
Only in so far as I was there and listening to him and going at a lesser reading pace.

6. Were the special classes interesting?

	Child	Parents	Teacher	Tutor
Yes	12	11	12	13
Don't know; no response			1	
No	1	2		

The children, parents, teachers, and tutors also generally indicated that the special classes had been interesting as well as having been helpful. Only one child and two parents reacted negatively.

Comments

Child (Yes)

Yes - Xmas present, birthday present.

Parents (Yes)

Had the book home frequently.
Yes - told of them sometimes.
Talked about them.
Sure liked his teacher - Pamela was the best.
Yes - watched clock as he seemed to enjoy it.
Liked the teacher.

(No)

She hated to go cause the other kids made fun of her.

Teacher (Yes)

Yes, they must have been for its been my observation that he was eager to go.
I believe so because he was always anxious and happy to attend.
Mary looked forward to the classes. She liked her instructor very much.
Evidently, because he was always anxious to go.
He seemed to look forward to each class.
He liked them a little.

Tutor (Yes)

I enjoyed being with him and tried to give him leeway and yet do what was best for him. At times we were both bored.

Comments continued

Tutor (Yes)

I feel that both Kevin and myself enjoyed the special classes.
Yes, I tried to make it interesting.
She seemed to always be interested in what was going on, especially when she was able to show progress that she had made. Ample opportunity was made for this.
Yes, I tried to make them so by varying the activities from week to week.
Yes. Many times we would forget about the workbook entirely and play word games or work on special projects to learn the next section's new words.
Special classes were interesting because the material itself was interesting to him. I also tried to relate the stories to things he did and as a means of drawing him out - getting him to express his opinions.
Karl seemed to enjoy them.
Yes, they were - it was different every day.

7. Did the storybooks help him?

	Child	Parents	Teacher	Tutor
Yes	10	7	10	11
Don't know; no response		5	3	
No	3	1		2

The reactions to the helpfulness of the storybooks in the reading activities were generally affirmative. Three children responded negatively; and two of the tutors and one parent were of the same opinion. Five parents and three teachers had no knowledge of the storybooks or were uncertain as to their effectiveness in helping the children to read.

Comments

Teacher (Yes)

Apparently in the special class, yes -
Yes, she was very proud of the books she had read.

Comments continued

Tutor (Yes)

Yes. There were not enough of them. I brought in some extra ones.
He enjoyed the outside programmed book but they alone did not satisfy his reading.
Yes. It was spice to the meat of the whole program.
Yes, it helped her to read for comprehension.
Kurt read the best when reading from the storybooks. Because they were interesting, he read smoother without even noticing it. They helped him see word groups rather than separate words.
I believe they did because he enjoyed reading them and he improved while he was reading them.
Yes - #13 was a lot of fun.

(No)

He hated them and asked that I not bring any more.
Karl didn't like reading the storybooks.

8. What did he like best about the special reading classes? the reading books? (Since some of the responses mentioned several things which were liked, the total number of responses in each column may be greater than 13, the number of respondents.)

	Child	Parents	Teacher	Tutor
Materials, board work, liked all of it	18	6	7	7
How to learn to read, acquiring skills, sense of accomplishment	2	1	3	3
Special attention; teacher (tutor)	1	8	9	9
Other; no response; don't know	6	2	1	2

While the children most frequently mentioned liking everything about the reading activities or the special reading materials, parents, teachers, and tutors felt the special attention provided by the tutor to be the most liked aspect of the program. Parents, teachers, and tutors also felt that the reading materials were also generally liked by the children.

9. What did he like least about the special reading classes? the reading books?

	Child	Parents	Teacher	Tutor
No dislikes	12	9	9	1
Materials, procedures	5	1	1	9
Facilities or scheduling	1	3		1
Other; no response; don't know	6	3	3	4

There were few disliked features of the reading program expressed. Tests and drills were mentioned by both children and their tutors. Three parents commented on facilities or a problem involved in scheduling their special classes.

10. Did the tutor help him learn?

	Child	Parents	Teacher	Tutor
Yes	13	12	10	10
Don't know; no response		1	3	1
No				2

In general, the reactions were that the tutors had helped the children learn through the special classes. All of the children gave an affirmative reply. One parent and three teachers were uncertain or gave no response. Two of the tutors felt that they had not been particularly effective in helping the children, while one of the tutors was uncertain about his having been of help.

Comments

Parents (Yes)

Not especially, but tutor was accepting of his problems.
It must have somewhat.

Teacher (Yes)

Kevin says Peter helped him to spell better and taught him the vowels. He also helped him to become a better reader.
He certainly must have motivated the situation.
Definitely, Mary has much more self-confidence, smiles, and responds more readily, and will initiate a conversation now.
I'm sure she did a good job.
Karl says he feels he can read much better and I would say, in general, his attitude is improved toward reading.

Tutor (Yes)

Yes. The mere fact of the special attention and understanding.
Yes, and although a great amount of material was not covered, she did acquire various reading abilities that she did not have before and which would stay with her.
I felt I helped her in social manners, other little things such as pronunciation and spelling.
I think I helped him learn both about reading, about himself, and about what a friend is.
Yes, I did, because he seemed to improve.
To a small extent, yes.

(Don't know)

I cannot attempt to answer the question because I do not know what effect it had on his other subjects.

(No)

No. He learns what he wants to and he wants to be a truck driver. What's school have to do with trucking?
I don't really think I helped her that much. I think she could have probably learned as much by herself.

11. How did the tutor help him learn?

	Child	Parents	Teacher	Tutor
Activities associated directly with reading, e.g., reading aloud; sounding out words; motivation game; writing; board work; different approach.	11	6	4	7
Personal qualities of tutor; individualized attention	1		5	5
Other; no response; don't know	1	7	4	1

Activities associated directly with reading instruction were mentioned most frequently as the learning help provided by the tutors. Also, as in item eight of this questionnaire, the individualized attention from the tutor was seen as a particularly helpful contribution to improvement in reading.

12. Is twice a week often enough to meet with the tutor?

	Child	Parents	Teacher	Tutor
Should be more often	1	4	1	8
Often enough	12	6	10	4
Other; no response; don't know		3	2	1

The children, parents, and teachers generally felt that two reading sessions per week were adequate. A majority of the tutors, however, indicated that there should be more than two meetings per week. None of the respondents stated that there should be fewer meetings.

Comments

Tutor (Often enough)

Yes. But make sure to go twice a week.
Because Kevin seems to be slower in the other school subjects, I feel that twice a week was sufficient.

(Should be more often)

No - from three times a week to every day should be used.
No. There is hardly enough time to thoroughly cover each unit in one hour. If we move too slowly we can't take them very far from where they are. At least three times a week.
Not nearly. Should be every day for an hour a day.
No, shorter periods each day would be better.
No, each day for a shorter time would be better.
I think at least three meetings would be valuable or else increase the length of the program. This would allow for a more meaningful relationship and more of the problems could be worked with.
I believe three times a week would be better.

(Other)

Yes and no. She could use the reading class every day but my coming could tend to become monotonous resulting in a loss of interest.

13. Was the room suitable for these special reading classes?

	Child	Parents	Teacher	Tutor
Yes	13	3	7	5
Only partial, unsuitable at times		2	4	6
Don't know; no response; nothing in particular		4	1	
No		4	1	2

A variety of rooms was used by the children and tutors for the reading sessions -- library; classroom, while the regular class was involved elsewhere; teachers' room; janitor's room; kitchen; gymnasium; principal's office. Some of these arrangements posed some problems as indicated by the reactions to the questionnaire, e.g., interruptions by students and staff; no chalkboard. All of the children, however, felt that the room arrangements were quite suitable. Even though in some cases the rooms may not have been completely adequate for tutoring purposes, every school was able to provide some space during the day for the one or two students involved in the study. Space limitations in already crowded schools would pose a real problem if tutoring were planned for a substantial number of students.

Comments

Parents

Didn't make too much difference.
Nice day met outside, nothing in particular about room.
No - kindergarten room.
Library was best - used janitor's room sometimes.
Kitchen was best - quieter.
Library - kindergarten - both were good places.
Kelly didn't volunteer this information - may have been the library.
Gym and teacher's room - both o.k.

Tutor (Yes)

It was O.K. but there was no blackboard.
Our room was very good. It was the teacher's room and there was plenty of work space, it was away from noise and was well lighted.
Yes, we used the library, and made use of the bulletin boards and books which were on display there.
Yes, it was, it was private.

(Partially)

At first, yes. We had a large art room and a board. The last half we had a small "hole" and no board. He liked to get up and walk around now and then.
Yes, the first semester we had an excellent set-up in the kindergarten room. No, the second semester we did not have a blackboard. Otherwise when the library wasn't in use we had a pretty good room. A few times we had to use the janitor's room or the duplicating room.
The art room was satisfactory; but in later sessions when the kitchen was used there were numerous instances of interruption which were disturbing and unavoidable.
Yes and no. One day we were in the library which was fine. The other day we were in the spare classroom which the janitor used as his storeroom. This wasn't too ideal.

Comments continued

Tutor (Partially)

On Wednesdays we had the library to ourselves which was a great place both for quiet and when we scanned the shelves for different types of books. On Fridays we had to work in Mrs. Johnson's office which was a less desirable place for reasons stated above.
Not always, but Kirk didn't seem to care.

(No)

No. We got shifted from the library to teacher's lounge to the clerical room.
No - we were shifted from library to principal's office to custodian's room. There was never a blackboard which would have been a great help.

14. Do you feel he likes school better or less well since last fall?

	Child	Parents	Teacher	Tutor
Better	11	10	8	11
Same; no change	1	3	5	1
Less	1			1
No response; don't know				

In general, the reactions were that the children liked school more in the spring than they had in the fall. Only one child stated that he liked school less well. Five of the teachers, three parents, and one tutor indicated that they had seen no change in the attitude of the child toward school. The one tutor who felt the child he had worked with liked school less added "but after all, so do I. One gets weary of school by spring."

Comments

Parents (Better)

Likes school - especially tutoring days.
Yes, especially his reading. He likes to read now.
I feel he likes it better, he loves to help where he can. He tries to please.
Has more self-confidence.
Margot voices positive feelings for school.
Kirk's reaction to school is so varied and inconstant, it is difficult to give a statement; but I do believe he likes school better.

(Same)

I haven't noticed any decided difference.
About the same.

Tutor (Better)

Maybe a little better. He likes to be around other kids although he chums with a 14 year old at home. The 14 year old has guns and loads of stuff he shares with Kim.
Better. I noticed that after about 3 months he wasn't getting in as many fights as he used to and also he did not have to be moved by the teacher.
Mary seems to be enjoying classroom activities much more than previously, as reported by her teacher.
Yes, she isn't absent nearly as often. When she didn't feel like coming she would make up an excuse.

(Less)

Less - but after all, so do I. One gets weary of school by spring.

15. Has there been any change in the way his classmates act toward him since last fall?

	Child	Parents	Teacher	Tutor
More accepted; better liked	3	4	6	6
Same	6	5	5	2
Less accepted; less liked	1	1		
Other; no response; don't know	3	3	2	5

Children, parents, teachers, and tutors, in general, indicated that there either had been no change in the way the children were treated by their classmates or that the children were more accepted in the spring than they had been in the fall. Only one child and one parent indicated less acceptance. Three children indicated they were better liked by their classmates; six stated conditions had not changed. Essentially the same pattern of reactions was given by the parents.

Comments

Child (More)

Yes - do things for me
Yes - went more places with them.

(Less)

Yes - keep picking on me now.

Parents (More)

Teacher reports better accepted - was singled out at initial part of session.
Improved.
Little more accepted - less tendency toward crying.

(Less)

Yes, seems worse.

(Same)

No noticeable change - seems well liked.
Accepted same way - very well.

(Other)

Was teased, but not mean - it didn't bother him so soon stopped.
Some accept him - largely due to classroom teacher. Some refer to him as "mental."

Teacher (Better)

He says he has more friends now.

Comments continued

Teacher (Better)

Mary is not as shy as she was and seems to be included in group activities more often.
Yes, considerable. They are more friendly.
Some include him more often.
Somewhat - they get very impatient at times but all have much compassion for him.

(Same)

No, he has always been rather friendly and sought after.
I feel he is pretty well liked and has been.

(Other)

She is included some in recess activities but is not sought out by the others.

Tutor (Better)

I feel that the class accepts Kevin more for what he really is. Most of the class like him.
Yes, more congenial.
Mary is included in more activities now as the result of her not being as shy and withdrawn as she was before. She is more friendly toward the other children and they in return towards her.
Yes, indeed. His teacher said at the beginning of the year he had no friends. Since he has become more confident and less naughty, he has gained many new friends. Besides, he has participated in something which they couldn't - hence, he's special.
Yes, they act as if he is a little special.

(Same)

I wasn't in much contact with her classmates but thought they were always friendly towards her when I did see them.
He still says that the other children don't play with him.

(Other; don't know)

I could not answer this. When I arrived they would all try to tell him I was there. If they saw me, it made him kind of special - and too, having a coke every now and then, a celebrity.
Having a special tutor has made Kurt seem more important to his classmates. His teacher also says other children ask why they can't have special classes too. Kurt reports older children pick on him.

16. Has he changed the way he acts at home and/or at school since last fall?

	Child	Parents	Teacher	Tutor
Better	2	6	7	9
Same	4	5	1	
Worse				
Other; no response; don't know; no change specified	7	2	5	4

Concerning behavior at school or at home, in general, the reactions of the parents, teachers, and tutors were that the children showed more positive behavior or that the children's behavior had not changed. No child was rated as demonstrating worse behavior at the end of the tutoring period. Two children stated their behavior had improved.

Comments

Child (Better)

Yes - help more
Yes - don't fight now.

Parents (Better)

Picks up paper - can sound out words much better.
Lot better than he used to.
Yes - gets along with other kids better.
Improved - never has been difficult.
Yes - improved - still needs attention.

(Same)

Not noticeable - just as bossy.
Still fights.

(Don't know)

Couldn't really say - older brother kids her about tutoring.

Comments continued

Teacher (Better)

Yes, tries to practice self-discipline.

Definitely yes, but remember, he is not the kind of boy who doesn't bear watching and at all times. Mischievous.

Yes, she responds more freely and with more enthusiasm.

Has fewer nervous habits.

Margot has become a more active participant lately.

He isn't quite as aggressive.

Yes, though I will have to say this is unpredictable and spasmadic.

(Other)

He is not a discipline problem but he does not stay with his work other than a very short span of time.

She has never been a behavior problem.

Tutor (Better)

Kevin was quite restless and could not sit still for a long length of time. This seemed to improve somewhat during the year. More work is needed to improve it more.

At first he did not care and that's how he would respond. When I asked him a question about his wishes - but this lasted only the first month when not finding overwhelming acceptance on my part about fighting and seeing my interest in sports and hunting - I think he began to channel his talents along those lines.

Initially, of course, she was very shy and gradually this disappeared and she became quite spontaneous and outgoing. At first she would talk only when asked a specific question but later volunteered much information of home life and various other aspects of her relationships.

Yes, she definitely has changed as a person. She doesn't hang on me so much.

At first he didn't trust me. He wouldn't talk or smile until one day his teacher tripped over the wastebasket - I laughed and then he figured I was O.K. He began to talk more, we'd joke, and he'd call me "Kid."

Kurt has become more communicative, expresses his opinions more freely, is more aggressive in his speech and actions, acts more spontaneously, is less apathetic, seems more confident of himself, expresses more spirit in voice, makes more facial expressions, and is more moody.

Yes, he used to have a hard time staying still for a longer time. He also used to act silly, but now he doesn't do these things so often.

At first he would not look directly at me when he was speaking, but the last few sessions he did.

Comments continued

Tutor (Other)

He always was very open and frank saying what he thought. Mainly, at the end he was telling me about what tricks and dirty stunts he would pull. He trusted me with devilish schemes he contrived. He sounded normal.

Yes and no. She was moody, then wasn't, but often times slips back into her moodiness. She did start working harder towards the end.

Karl always seemed eager and willing to talk.

17. Child: "What is the most important thing a grown-up can do to help you read better?"

Parent, Teacher, and Tutor: "What is the most important thing you can do to help your child to read better?"

	Child	Parents	Teacher	Tutor
a. Activities associated directly with reading; reading aloud; sound words you don't know; listen to him read; listen to me read; read to me; give you lessons; help study; provide suitable material.	9	6	5	2
b. Motivation; make him read; encourage; praise.		2	7	5
c. Individual attention; patience; build up self-confidence; make him feel secure; sense of accomplishment.	1		4	8
d. Other; don't know; no response	3	5		

As with items eight and eleven, children, parents, and teachers most frequently mentioned activities associated directly with reading instruction as being of primary importance. Teachers also put strong emphasis on motivation. The tutors most often listed individual attention and building feelings of self-confidence in the child. The tutors also saw motivation as being related and important.

Comments

Child (Activities)

Give you lessons.
Have you read a lot.
To read an hour every day.
Help on words you don't get.
Listen to me read.
Sit down and listen to me read.
Help you with your words.
Read words that you don't know.
Read out loud.

(Other)

Help study.

Parents (Activities)

Have him read more.
Read out loud.
Listen to her.
Let her read to me.
Sat down with him and listened to him.
Used first and second level material - he wants us to listen to him.

(Motivation)

Mainly make him read.
Encourage them to read - interest when they read - even to read to younger sister - children read devotions.

(Other)

Bring books home - can help now - third he didn't bring.

Teacher (Activities)

Help him with phonetic techniques.
Lots of easy reading material with an opportunity to read orally with a command of the words, sentences, and understanding of the story.
Provide interesting material at the child's own level.
Supply interesting material at a level which is a challenge but not frustration for the child.
Give him a good phonetic background to rely on.
Use developmental basic eye span techniques.

Comments continued

Teacher (Motivation)

Motivate him to like to read and to want to read.
Instill a desire to read.
To get him to want to read on his own.
Motivation.
Praise him for jobs well done and encourage him to do his best.
Find his interest - praise him when praise is due him.
Make him feel secure.
Motivate his interest using a variety of stimulation (audio-visual, etc.).
High interest level - easy vocabulary.

(Individual attention)

More time - more individual attention - more patience.
Patience.

Tutor (Activities)

Practice reading, providing, of course, they already have the basics firmly in mind.
Since there are many different reading problems, it is difficult to note one thing which could help all. I think the basic sounds of letters is a fundamental necessity. Slowing down for more careful reading comes second in my book.

(Motivation)

Teach reading in a relaxed atmosphere with an emphasis on the personal need of reading on the child.
Create an interest in reading, and show him that it can be fun.
To create a situation where they want to learn - where a child has a sense of accomplishment. I think this program was very good.

(Individual attention)

Be patient.
Know her problem and know how to solve it and then do it patiently. If one method fails, try, try another.
The most important thing is to give the child positive experiences with reading.
I believe that the most important thing you can do is treat the student like an individual.
Accept him and listen to him.
Find something he is interested in. Do NOT cause him any embarrassment if he is slow, choppy or makes mistakes.

The following groups of questions completed the Tutored Reading Evaluations for the child, parent, teacher, and tutor, respectively:

Child

18. Are you as good a reader as most other kids in your class? not as good? better?

	Child
Better	5
As good	5
Not as good	3

In general, the self-evaluations of reading ability were positive. Ten of the children reported they felt they were as good a reader or were better than most of their classmates. Only three felt they were not as good.

Child

19. Do you want to be a still better reader?
(Teacher 20: Does he want to learn to read better?)

	Child	Teacher
Yes	11	11
Other; don't know	1	1
No	1	1

The reactions of both the children and the teachers, in general, were that the children wanted to improve in their reading. The patterns of reactions for the children and teachers were the same; eleven positive, one negative, and one uncertain.

Child

20. Will you be able to learn to read better?

	Child
Yes	12
Maybe	1
No	

Not only, in general, do the children want to improve in their reading, they also indicated that they felt they had the ability to do so. Not one of the children stated that he did not have the ability to learn to read better.

Child

21. What reading group are you in?

22. What reading group do you want to be in?

(Teacher 19: What reading group was child in last October?
What reading group is he in now?)

			Child	Teacher
# 21	Upper		5	
	Middle		5	
	Slow		3	
# 22	Upper		7	
	Middle		5	
	Slow		1	
Teacher 19				
	Upper			1
	Middle	(October)		3
	Slow			9
	Upper			
	Middle	(Now)		5
	Slow			8

Five children reported they were in an upper reading group; five reported themselves as being in a middle group; and three reported they were in a slow group. When asked what reading group they wanted to be in - seven indicated they would like to be in an upper group, while one stated he would like to be in a slower reading group. The reading levels reported by the teachers varied somewhat from those given by the children. While five children had reported themselves to be in an upper reading group, none of the teachers indicated that the child in her classroom was in an upper reading group. In fact, teachers reported eight of the thirteen children as being in a slow reading group, the remainder being in a middle group. Prior to the tutoring, nine children were reported as having been in a slow reading group, three in a middle, and one in an upper. There was little change in the numbers in this distribution following the tutoring activities. One less was reported as being in a slow group; while no child was reported as being in an upper group.

Child
23. Is reading important? Why?

	Child
Yes	13
No	
Other; no response; don't know	

The reactions of all children were that reading is important. The reasons given included: to help in other school subjects; to be able to read newspapers; to use on a job; for enjoyment.

Comments

Child

Yes - you have to know how to read checks and bills.
Yes - cause like to - if not can't read paper, history or high school work.
Yes - help you learn.
Yes - newspapers.
Yes - learn the words - can read stories.
Yes - grow up wouldn't know how to spell or read.
Yes - helps to do things when grown up.
Yes - helps me learn.
Yes - got to pass to next grade - reading helps.
Yes - stories are real good.
Yes - so you can learn lots of stuff.
Yes - helps in lot of other subjects.

Child

24. How would you teach somebody to read?

	Child
Read to them	4
Have them read aloud	5
Other; bring books; give lessons	2
Don't know; no response	2

The two main techniques the children said they would use in teaching someone to read were to read to them and to have them read aloud.

Comments

Child

Read out loud to them - help with words.
I would read - have them follow along.
Listen to see if they make mistakes.
Give him lessons.
Make read out loud - make read a lot - ask questions about whats read - give him books.

Parents

18. Were there any particular problems created for you by this program?

	Parents
Yes	5
No	7
No response	1

Although most parents stated they have had no problems resulting from the tutoring program, a number indicated concern about some of the effects on the children. One parent mentioned that her child had been "made fun of" by the classmates. Also mentioned as a problem for the children was the missing of classwork. One parent reported her child as having to "make up" the time given to the tutoring.

Comments

Parents (Yes)

The other kids made fun of her.
He missed out on classwork - this concerned him (social studies), at times Science.
Had to stay after to make up tutoring time lost.
Conflict with spelling test which he had to take later - administered by another pupil which he didn't care for.
Missing social studies, none otherwise - program welcomed.

(No)

No - it was good - got help - family didn't have time.
None - not at all.

Parent

19. What are some of the things the child told you about the program?

	Parents
Positive response	6
Negative response	3
Other; don't know; no response	4

Only three parents reported having heard anything negative about the tutoring program from the children. The other parental reactions were either most favorable or were neutral.

Comments

Parents (Positive)

Exchange of Xmas presents - ended too quickly.
Enjoys different kinds of books - going to do more (reading).
Games - information on books.

(Negative)

Non-communicative - except to say that he didn't want to be in tutoring program again - felt different than others.
Most of the others making fun of her.

(Other)

Not too talkative.
Heard about tutor.

Parent

20. Do you have any other observations and suggestions you would like to offer?

	Parents
Positive observation or suggestion	8
Negative response	
Other; no observations; no response	5

Eight parents offered positive observations about the program; no negative comments were given. In general, the parents felt that the program of tutoring was worthwhile and should be continued. One parent said that other children in the family had gained from her son's participation in the program. One parent also felt that the tutoring sessions should be offered more often than twice a week.

Comments

Parents (Positive)

More frequent meeting with tutoring person.
Disappointed when sessions were missed - initial ribbing.
Should be continued - smaller youngsters in family gained from Keith.
They need help outside of tutoring.
Doing a tremendous job - wish it could continue another year.
It's worthwhile - others could benefit from it - classroom teacher remarked on the improvement.
Early hearing problem - now ameliorated - may have interfered with his start in reading - coordination problem may also be associated with this early ear problem. Try big brother approach - mixes well with strangers.
This was a good age and time to work with Kenneth.

(Other)

Gets summer weekly reader on a book-a-month club.

Teacher

18. Were there any particular problems created for you by this program?

	Teacher
Yes	8
No	5
No response; don't know	

Teacher 18 - continued

Was the class disrupted by the departure or return of the child?

	Teacher
Yes	1
No	10
No response; don't know; other	2

Most of the problems for the teachers associated with the tutoring program centered around the children's missing class presentations and assignments. This was mentioned as a problem by eight of the teachers involved in the study. Only one teacher stated that the child's departure from or return to the classroom was disrupting.

Comments

Teacher (Yes)

Yes, he was out of the room an hour two days a week. Some.
Any program which takes some child or children from the room would create a problem in use of audio-visual equipment, etc. Two groups from our room went for special help at different times daily (second semester) and Mary was gone at still a different time. It was hard to find times when audio-visual equipment, films, etc., were available, and all children present. She sometimes missed part of physical education which she needs also.
She missed out on presentation of work for her reading group. - No.
No, however, he sometimes missed out on a good science lesson. -No.
Sometimes our schedule was changed for the day and Kenneth had to make up a Spelling test. On the whole, very few problems. - Seldom. No.
He missed out on explanations and doing assignments. Then he refused to finish his work.

(No)

I haven't felt there were any. - No, it wasn't.

Teacher
19. See Child 21.

Teacher
20. See Child 19.

Teacher
21. Do you have any other observations or suggestions you would like to offer?

	Teacher
Positive observations or suggestions	7
Negative responses	
Other; no response; no observation offered	6

The responses to this item suggest that, in general, the program was well regarded by the teachers. Two of them would like to have had more knowledge of the program and its conduct. The fine spirit of teacher cooperation is also evident in the responses to this question.

Comments

(Positive)

I have very little knowledge of the type of program that was engaged in with the subject but I've wondered, if perhaps, there might be some possibility of a sort of correlation with the classroom teacher. In that way, the tutor would know what the teacher was trying to do, and the teacher would know what the tutor was trying to do - this might strengthen the program.

I wish it were possible for Kevin to have more help next year.

Perhaps I could give more definite answers if I had inquired more about it. I wanted the tutor to always feel he had complete command; and I wanted to cooperate with him at all times.

Kent's experience in grade three had been rather displeasing to him. Therefore, his attitude in early fourth grade was entirely negative. Throughout the year he has changed his mode of behavior to such an extent that teachers comment that he is not the same boy. He is pleasant and eager to work.

Encourage and comment favorably about his progress.

Comments continued

Teacher (Positive)

Everyone concerned is grateful for this tutor program and I hope it can be continued until there is a room established for the emotionally disturbed child. We are grateful and pleased with Karl's improvement, even though it may be slight, it is still an accomplishment and a step forward.

I'd like to know a little bit more about what is being done in the special class. I saw his last book because he kept it when the class was over. I wondered how the starting point was determined, etc.

(Other)

Is less shy and feels more equal to her peers.

Unless he is carefully supervised he could become very careless in getting his work done on time.

His strong dislike for school makes it hard to work with him. His friends help him along the way. His interest is limited only to what he likes which has nothing to do with school. He does very well in Art. This ability could be used to help or create interest in certain types of social study work. He is easily discouraged; therefore, one must be cautious in this matter.

Tutor

18. What were some of the main problems with the child, teacher, or parents which you encountered?

	Tutor
CHILD	
Problem mentioned	6
No problems mentioned	7
TEACHER	
Problems mentioned	3
No problems mentioned	10
PARENTS	
Problems mentioned	2
No problems mentioned	11

In general, the tutor's reactions were that they had encountered no particular problems with the parents or teachers. The problems with the child most frequently mentioned were the child's shyness, lack of confidence, and lack of motivation for reading. Most of the tutors, however, said they had encountered no special problems in their work with the children.

Comments

Teachers are forced by the curriculum to cover so much material in one year. Some material is, therefore, rushed upon the students when they are not ready. The parents put pressure on the child to finish the work. The child sometimes wants to give up and forget the whole thing.

Keith was always a good kid. He just needed his energies channeled a little bit; he was quiet but he could get very squirrely. The teacher was wonderful to me!! When talking to Keith's mother, she told me to "make him behave" and I assured her there was no need to make him behave. He was a good boy - and he was.

No problems with the teacher or parents. As was previously stated, Mary was tremendously shy at first and this in itself was the most difficult thing to overcome.

I encountered no problems with the teacher or parents - but as I wrote in my summary, Margot often made intentional errors just so I would have to correct her and pay attention to her.

Getting the child out of his shell and giving him a confidence which would enable him to do better in school work and be more sociable so that his teacher and classmates would be more accepting toward him.

A big problem with Kurt was getting him to use a systematic approach to unknown words. It was difficult to get him to sound words out. He felt embarrassed to make noises that might be wrong. Another problem was impressing the importance of reading all the sentences when reading silently. He liked to read and then answer questions, but hurried to get to the writing part.

Karl often would not want to read, but would want to talk instead.

I didn't really have any problems with the child or the teacher and I didn't get to know the parents at all.

Misunderstanding of parents as to what this was all about and also teacher seemed uninformed too. After everyone understood what was going on they seemed to go along with it.

The teacher did not feel I was qualified to discuss the pupil.

The child was very moody and would only cooperate in answer if the spirit moved her. She made up stories and excuses for everything. She was absent a lot. Parents would baby her. If she didn't want to come to school, she wouldn't have to. Teacher would not give her a chance. She knew she was helpless - and that's that!!

Tutor

19. Did you get to know (a) the child, (b) the parents, (c) the teacher?
(To varying degrees as indicated by comments)

		Tutor
CHILD		
	Yes	13
	No	0
PARENTS		
	Yes	6
	No	7
TEACHER		
	Yes	13
	No	0

The tutors' reactions to this question were that they had gotten to know the children very well and that they had, to a lesser degree, also come to be quite well acquainted with the teachers. A majority of the tutors said they had not gotten to know the parents at all. The others reported only very slight contact with the parents.

Comments

(a) Tutors knowing the child

Yes, I felt as if he were my brother.
Yes, very well - he could talk to me about anything and I would listen.
Knew her only from our daily conversations. I had no other contact with her.
Yes, only not as well as I hoped. However, learning of his problems, I think we did pretty well getting to know each other under the circumstances.
By the end of the year I felt I was getting to know Kurt quite well. I think he accepted me as a friend rather than as a teacher or authority figure.
I feel as though Karl felt at ease with me. We considered each other friends.
Yes, I believe I got to understand the child and some of his ways.

(b) Tutors knowing the parents

Although I did not make a formal visit to the home, I did get to meet the family in a store one day. Letters were also written.
Yes, the mother - I talked to her for a brief period about Keith and the program.
I met them at a Christmas program but felt I knew through talking with Molly and her teacher.
I met the mother when my husband and I took Kelly to a basketball game. She seemed very nice.
I met his mother once, and she seemed interested in Karl's reading.
I didn't get to know the parents at all.

(c) Tutors knowing the teacher

Yes - she was extremely concerned, and willing to help.
Because of her heavy teaching load, I got to talk with the teacher only a few times.
Very well. I would like to thank her for being so kind and cooperative.
Well enough, she was very friendly and cooperative, helpful in any way she thought she could be.
In a very distant way.
In part.
Yes, we would converse everyday and I knew her indirectly through my parents.
Yes, very well. My first impression was that she showed some hostility toward Kelly as he was a troublemaker. Later she became very warm toward him and I think, even proud.
Was very helpful in describing Kurt's classroom behavior, his attitudes and his home life. I used the information to help establish relaxed atmosphere in the class and for areas of talks.
I spoke with Karl's teacher on one or two occasions.
Yes, I found out how she would help me in any way so the student would improve.

Tutor

20. Were you trained adequately?

	Tutor
Yes	12
No	
Other; no response	1

Regarding their training for the tutoring activities, the tutors were in agreement that their preparation had been satisfactory. Many of the responses seem to reflect a feeling of confidence on the part of these college students to undertake this type of work with children.

Comments

(Yes)

What do you need to know except a liking for people? I got added help and suggestions when I asked.
Yes, it's a situation type of work one has to work out the system he thinks is best - not all working systems are the same.
Quite well. Much can be learned through experience with different methods - trial and error.
Certainly. Further methods lessons would have merely detracted from the mutual learning experience which was gained.
Yes, programmed reading and the administration of tests was easy to comprehend.
I came into the program late; but I feel that it was explained adequately.
I think I was. There wasn't much more that could have been done.

(Other)

I do not know what form of training would have been adequate.
I was able to cope with what problems arose. My English major helped here a bit with the grammar, syntax and verbal sounds. I think a college junior is adequately trained for this job without special coaching.

Tutor

21. Were you supervised adequately?

	Tutor
Yes	9
No	2
Other	2

Tutor reactions to the question of supervision, in general, were that the help they received from the supervisors was adequate. Two of the tutors indicated that they would have liked more help from the supervisors.

Comments

(Yes)

We had group meetings among the tutors and our supervisors where we interchanged ideas. This was helpful.

Yes, consultation was always available when needed.

Yes, actually none was really needed.

I was left pretty much on my own; but I feel this was good as it gave me a flexibility in our sessions.

Yes, I was. The supervisors came and observed one of my classes.

(No)

No, I wish the coordinators could observe more since most of us are not qualified teachers and they could give us suggestions on how to make the class more interesting. I realize we could ask for help but when you don't know if you're doing the wrong thing, how can you ask?

Tutor

22. Are there any other observations or suggestions you would like to offer? The comments made to this item were also generally included in the summary of the activities of the tutoring program completed by each tutor. These summaries are presented here.

Summary #1

All in all, it has been an experience. Although Mary has improved in her general, overall reading ability, she still has a long way to go. However, with the help she has received from myself and the help she will be getting in the other program, she should do well.

The most profound difference seems to be in her attitude and the less dominant role that shyness seems to be playing in her life. She is more outgoing, she does raise her hand more often in class, and probably more important, she laughs. This may seem an insignificant point but I was told earlier in the year by the library teacher that she had never heard Mary express laughter. That's saying something, I think; and if nothing else Mary is a happier child at this time and that, if nothing else, makes the whole program worthwhile.

Summary #2

A summary of this experience is a very hard thing to do. In the beginning, I saw a little boy with glasses who could just barely read. This same little boy was held back a year in school and the reason, I believe, was his lack of ability to read. And then six months later, after getting to know Keith and after working with him, the last day of our meetings, during a coketail party, he said to me, "You know, I'm just about the best reader in my class, and before I could just barely read at all."

How can a person explain the gratification that is felt? I know that I couldn't explain how great it made me feel. But yet, this same child on this last meeting left the room to get a story book and when he returned I asked him what time it was and he said, "The little hand is on 9 and the big hand is between the 2 and the 3." Could you imagine having mixed emotions about this time?

A complete summary would take a complete interview. I would hope that the log and the questionnaire could be of some aid in telling the researchers what happened. Thank you for this opportunity.

Summary #3

When the reading sessions began in October, Kevin did not like school because there was "too much work." Although I gave several placement tests, we had to start with Book #3 in the McGraw-Hill programmed material. Kevin enjoyed the diverse material because it was new and it was on his reading level of understanding. As the sessions progressed Kevin became more aware of his reading ability and tried to do "the best he knew how" with his school subjects.

I looked at his report card during the grading period. The first nine weeks showed that Kevin was about a C-D student academically. On the opposite side of the report card it showed many "X's" indicating that Kevin's behavior was not acceptable to the teacher. After many discussions with Kevin concerning his behavior, this portion of the report card improved. At the end of the second nine week grading period, the report showed an improvement in the behavior portion with little radical changes in the academic area.

Kevin has many interests. They range from raising pets to a third grade girl who he calls his girl friend. Through the use of story pictures, one could see that Kevin was creative in his thinking. He can tell what happened in the story, what happened now and what will happen in the future. Creative stories using the standard vocabulary were used to supplement the regular lessons, indicated in the teacher's manual.

When I met with Kevin's parents and teacher, they all indicated an improvement. I suggest that special classes for Kevin would be beneficial. However, I feel that twice a week is substantial for the present situation.

Summary #3 continued

I have enjoyed working with Kevin very much. I really got to know him as an individual. On certain days I could not attempt to do any formal reading instruction because Kevin would be extremely restless. I have tried to be as calm and understanding of his problems as I could and yet attempt to raise his reading level of understanding. Kevin is not a "bad kid" and should be worked with further in the near future.

Summary #4

Kim only did 30 pages in Book 7 but I gave him the test on the book anyway. He got 100. I then gave him the "Final Test" covering Books 1-7. He got 5 wrong. It would have been about 8 or 9 but I gave him some help like having him read the problem aloud. Chances were that there was 1 or 2 words in the question or answer he didn't know.

Kim wants to be a truck driver and couldn't care less about school. It's not important to him. But at home he helps his dad farm, and plow and drives tractor, etc.

He will do what he wants as long as it has to do with machinery. His teacher said "All he likes about school is recess, lunch-time, and maybe Art." The rest of the time he sits and tinkers around with a pencil or some contraption he can take apart and put back together.

When he doesn't know something he won't ask, but instead guesses and assumes that it's right. He doesn't check his work because "He's right," and he doesn't like to read aloud because he's "scared." He will read silently, do the work assigned, and move when you push him.

Summary #5

I do think that Margot progressed throughout the year as a result of tutoring; but I'm not so sure that her progress was primarily in the reading field. She does, of course, read better now than she did in October, but that is to be expected. I'm not certain that she reads much better than she would have with just the regular amount of classroom reading. Now she reads with better intonation and expression than she previously did and she is able to read much more smoothly. She can recognize the difference between words of similar spelling.

However, despite what progress she may have made in reading, she definitely has changed as a person. In the beginning she talked constantly and always wanted to hug me or hold my hand. Now she doesn't hang on me so much and doesn't talk quite so much, which is a bit of a relief since we got more done toward the end of the year. In the beginning

Summary #5 continued

she made a lot of mistakes which I know very well were intentional just so I would correct her and so she could gain my attention. Later, she seemed to realize that she didn't have to vie for my attention; and since then she has settled down a lot and is much easier to work with. Usually we work in the book for a while, do some supplementary exercises, and then talk for about the last ten minutes. This worked much better toward the end of the year because in the beginning she disrupted my best laid plans with some story that might have slightly pertained to the stories. Sometimes I'm sure she made up the stories just so I would pay attention to her.

Now she doesn't make so many intentional mistakes and she seems more secure and independent than she did in October; but after all she is six months older.

Summary #6

I have thoroughly enjoyed this experience. Kent has progressed a great deal from where he was in October. Whether it is from the tutoring or from a completely new atmosphere in this year's school room, I cannot tell. However, I think it helped him by just knowing that someone "cared enough to come out there to help him." We spent a lot of time talking. We both had a brother about the same age. He liked my brother quite well when he met him last winter. He seems to be lacking in peers because there are no neighbor kids nearby with whom to play. He has one friend who comes over about once a week. He plays with his cousins quite often when it is possible. He hunts with his brother once in a while. He didn't appear to be rejected at home. To me, his parents appeared to be the kind who would do most anything for him but sometimes didn't know what he needed most. Although his mother works, she never leaves him home alone -- there is always someone there to be with him. I found Kent to be a very likeable child.

The series was good in that it allowed for easy reading at a higher interest level. The illustrations are fabulous for appealing to the person who previously has encountered difficulty or a bad connotation of reading. One criticism I have is that the printed "u" in the book caused Kent to print his u's like that and soon his v's and u's looked much alike. The characters and action in the stories held his interest very well. He also enjoyed the story books. One big suggestion: We need more time! The various exercises are good drill; but we didn't have time for all of them. I omitted the creative writing exercises because I thought he might be getting them in his regular class. I feel as if I'm just beginning. I do feel that Kent has been helped a great deal by this program.

Summary #7

By the end of the year Kurt seemed like a different person. At first he was very quiet and uncommunicative. He had little confidence in his reading ability and could not attack a new word by sounding it out or finding smaller familiar words within the unknown word. He often read what he thought was written and not that which was written. Although he paid attention, he gave no reaction to pictures or stories. But now he often suggested things or talked about the story on his own. Often his comments are: "Boy, I'd catch it if I did that," or "No, I don't like that," or "I never do get to go to town." Kurt seemed more comfortable when we were having a snack and seemed to show the greatest burst of energy at that time. He seemed hungry and sweets were a treat. Now he is able to read with more confidence, has made progress attacking new words and has learned that people are interested in him. I'm sure Kurt has more self-respect because he has experienced success - he can read better than he could in October. He is very pleased, and just beams when his teacher and I tell him how well he can read.

Summary #8

We used mainly the programmed reading books. We started in Book #10; we went about half way; it was too easy so we went to Book 12. This book was a little better; but after about half way it got too easy so we went on to Book 15. This book still was too easy; so after a while we went on to Book 17 which was about his ability; and we finished in it. Besides these books, once in a while Kenneth brought a book of his own, and we went a little way in it. I found out that Kenneth has a tendency to pick books which are interesting but far too difficult for him. He likes to read an awful lot. He was a very cooperative student.

Summary #9

I enjoyed working with Kirk very much. He was very cooperative, quiet, and well mannered. At times we didn't have the same room and had to find some place else to work - this did not seem to bother him. He always got a chair for me to sit on and put it back at the end of the lesson. I asked him to do this once; and he did it on his own after that. If he didn't recognize a word, he looked it up in a dictionary. At first he didn't seem to know how to use one, or just what could be found in a dictionary, but it didn't take him long to learn. He did learn to read with more expression. His use of i and e, and o and a, did improve. We looked up a lot of things in reference books; and he would remember later what we had talked about when it would appear in later reading. For a long time he would not look directly at me when he was talking (even about some recreation) but the last few times he did. He liked to talk about his family and his friends. He was very proud of his big brother who is in the service. He was very diligent about using the programmed material.

Summary #9 continued

He did not try to do something to get out of using this. He talked about his friends and family only when I asked him a leading question. When I told him I thought it was time to get back to the reading, he would do it right away. I hope this time spent with Kirk will be of benefit to him. I have really enjoyed working with him. Thank you very much for the opportunity.

Summary #10

As far as reading is concerned, Karl has been progressing slowly. I feel that if he could concentrate better, his reading would be much improved. He sometimes simply doesn't think. For example, he will be able to read a word once; but five minutes later, he will insist that he can't say the same word. Also, he may be able to read words as they appear in the workbook; but if these same words are presented to him in a list without the pictorial aids, he sometimes is unable to read them. He also sometimes chooses the correct answer, but reads that word wrong.

Karl still says that he has no friends to play with. His brothers and sisters break his toys, so he doesn't have anything to play with at home. I feel that Karl is a boy who wants and needs lots of attention. He always seemed to enjoy our sessions and the way he has always been able to talk to me.

Summary #11

Kelly began these sessions as a quiet, somewhat frightened little boy. He was noticeably afraid to smile and found it difficult to interact. It was evident from the first that his problems in reading stemmed from a lack of the basic knowledge of vowels and vowel sounds. This inadequacy showed up clearly in the Phonics Check Test given early in the fall. To overcome this difficulty we worked with similar words: bid, bed, bad, bud; lid, led, lad; bit, bet, bat, but, etc.. Once we established these differences and also the difference between the vowel name and the vowel sound -- we were well on our way. The reading difficulty dissolved and so did his tension and fear. His teacher told me that his grades had improved and so had his self-discipline and his ability to get along with others. He had become more popular with his classmates. This fact was clear to me as I watched him enjoying the cupcakes which I'd brought for him to treat on our last day together - his birthday.

Summary #12

In her reading, I feel there was an improvement. In the beginning she had trouble with her consonant sounds and word endings. She has now slowed down enough in her reading to see all the combination of sounds. Molly is a great story teller. If she didn't know a word, she would make one up, and a sentence to go along with it. However, since I was there to catch such happenings, she soon learned to ask for or to stumble over the word. She would also make up stories which, upon questioning, she could not back up and she would say "but" and drop it. She was also very moody. Some days I would say, "Good morning" and get no response; while other days she would start talking and continue for 15 minutes. Only if she felt like doing anything would we be able to accomplish anything. On one meeting (January) I asked her to repeat a word after me. It took her seven minutes to answer. Molly was very responsive to the monthly projects and would remind me of it every time. At the end of the month, when she could take it home, she would proudly display it in front of the room. I think it gave her satisfaction when I would come and get her, alone, as compared to the class. Her attitude toward school changed. She wasn't absent as often and her grades did improve. On the whole I think the program was helpful for Molly, however slow the response may be.

Discussion

This pilot project of the Eau Claire County Youth Study was designed to answer three questions:

1. Can a system be developed which will provide selected college students with remedial reading instruction and counseling skills which they can use successfully as tutors with children who are delinquency prone and retarded in reading?

Judging solely on the statistical analyses of the results from the tests, scales, and sociometric measures which were used, it could be concluded that the system which was developed to provide the college students with remedial reading instruction and counseling skills was not an effective one. Other evidence, however, suggests that the special tutoring may have offered some advantages to the children of the experimental group. The support for these findings is discussed in the answers to questions two and three.

In addition to providing the tutors with instructional skills, the training procedures were designed to enhance the tutors' abilities to establish rapport and to develop good working relationships with the parents and school personnel as well as with the children. From the comments the tutors made during the course of the remedial reading program and from the written summaries by each tutor, it became apparent that they developed feelings of warmth and concern for the children with whom they were involved. It seems that the tutors' interests in the children went beyond those concerned with reading improvement *per se*; they were sensitive to the successes, failures, pleasures, and pains in all areas of "their" child's life. One tutor said, "I think it helped him (the child) by just knowing that someone cared enough to come out there to help him."

The ability of the tutors to work well with the children and also with the parents and teachers seems clear. This is reflected not only in the reports of the tutors themselves but also in the favorable comments volunteered by the teachers and school principals. The tutors reported that they had become quite well acquainted with the teachers; but that they had only slight opportunity for contact with the parents.

When asked about their training for the tutoring activities, the tutors were in agreement that their preparation had been satisfactory. Many of the responses seemed to reflect a feeling of confidence on the part of these college students to undertake this type of work with children. Tutor reactions were, in general, that the help available to them by the reading supervisors had been adequate.

The tutors, college undergraduates, came to this research with no special background of courses in the teaching of reading or in counseling and no experience in working with children with reading handicaps. Teaching the complex skills of reading to such children, through the specialized techniques of programmed reading may require more background preparation than the five two-hour meetings and the supervisory procedures which were the plan of this study. The tutors did show an ability to relate to and work well with the children, teachers, and parents. No major difficulties arose in the conduct of the tutoring activities.

2. Do children who are delinquency prone and retarded in reading and who receive special tutorial instruction in reading achieve more in reading and do they show more improvement in adjustment and classroom behavior than similar children who do not receive the tutorial instruction?

None of the differences between the two groups in the amount of change in reading achievement, school behavior, social adjustment, self-concept, or anxiety over the six-month period of the tutoring in reading was statistically significant. It should be noted, however, that on the seventeen measurements involved in the comparisons, the mean change scores of the experimental group were in the direction of improvement on twelve; the mean change scores were in the direction of improvement on eleven measures for the control group. In reading achievement it would be expected that both groups would demonstrate gains inasmuch as *all Ss* were participating in their regular reading classes during the year in which the experimental Ss were involved in the six-month remedial reading program. Both groups did have improved reading scores in five of the six measures. On one of the reading comprehensive tests, both groups had lower post-test than pretest scores. On eleven measures, including the five reading achievement measures in which both groups showed gains, the mean change scores of the experimental group were in the direction of improvement and greater than those of the control group. The control group, on the other hand, had mean change scores which were in the direction of improvement and greater than the scores of the experimental group on only four of the measures. On two measures, one of which was in reading achievement, neither group had change scores which were in the direction of improvement.

3. What are the views of the children, tutors, teachers, and parents concerning the values, effects, and structure of the remedial reading program which was developed?

Although the tests, scales, and sociometric measures indicated no statistically significant advantages for the fourth graders who participated in the tutorial program, the reactions of the children, parents, teachers, and tutors, obtained from the evaluation questionnaires, were markedly in favor of the tutorial instruction. In general, the reactions of the children and their parents, teachers, and tutors, the people most clearly associated with the tutoring activities, were that: (1) the children had shown improvement in reading; (2) the tutors and the special classes had helped the children; (3) the children's liking for reading had increased; (4) the children read more often outside of school than they had before; (5) the children were doing better in their other subjects (other than reading); and (6) the children liked school better.

Further reactions from the children showed them generally to have positive attitudes toward reading and toward themselves as readers. Not only did the children want to improve in their reading, they also believed that they had the ability to do so. Regarding their abilities as readers, most of the children saw themselves as being as good a reader or even a better reader than most of their classmates. This view, however, was not generally shared by their teachers. The teachers reported eight of the children as being in a "slow" reading group; and the other five in a "middle" group at the close of the study. However, both the children and their teachers agreed that the children wanted to continue to improve in their reading. Reactions such as these (ones which seem to show attitudes of improvement and improvability) might well be seen as a potent force toward educational improvement. It would seem that, if such attitudes are held by a child and significant others around him, learning would be enhanced.

The children, parents, teachers, and tutors, in general, indicated that the children were either more accepted by their classmates or that there had been no change. Only one child and one parent indicated less acceptance. Concerning behavior at school or at home the children were viewed as showing more positive characteristics or at least not additional negative ones.

Considering the methods and materials of the tutorial program, the special classes were reported as having been interesting as well as helpful. The reading materials, including the storybooks, were judged as having been helpful and well-liked by the children. While the children responded as liking most everything involved in the tutoring activities, the parents and tutors felt the special attention provided by the tutor was the most outstanding aspect of the program.

The two meetings per week for the tutoring was generally judged by the children, parents, and teachers as being sufficient. Most of the tutors, however, felt that the meetings should be more frequent.

The locations in the schools, where the tutoring sessions were held, perhaps offered one of the biggest problems to the tutoring operations. Included among the "built-in" problems were lack of chalkboards and interruptions by other students and staff. Through the eyes of the children, however, the room arrangements were quite suitable and satisfactory. A variety of rooms had to be used - library; classroom, while the regular class was elsewhere; teacher's room; janitor's room; kitchen; gymnasium; and principal's office. Finding available space must be viewed as a big problem in establishing any in-school one-to-one program of help. It seems that most schools, crowded and constructed as they are, do not have the space required to provide individual help to large numbers of students. Perhaps space could be sought outside the school, e.g., homes, churches, libraries. Tutoring programs might also be made available in the school when regular classes are not scheduled. But, of course, each of these possibilities carries with it its own special problems.

As has already been mentioned, the general reactions to the tutoring program by the parents and teachers were favorable. The program was felt to be helpful and worth continuing. This attitude was reflected as well in the fine cooperation given by the teachers and parents. Further questioning, however, of the parents and teachers, did reveal some negative reactions. The most frequent criticism was that the children missed some classwork. One parent reported her child as having to "make up" the time given to tutoring. Another parent mentioned that her child had been "made fun of" by his classmates. Most of the problems for the teachers centered around the missing of class presentations and assignments. Only one teacher stated that the child's departure from or return to the classroom was disruptive.

Summary

Research evidence shows that reading retardation, classroom misbehavior, school dropout, and delinquency are related problems. The purpose of this portion of the Eau Claire County Youth Study was to investigate a tutored remedial reading program and its effects on the achievement, adjustment, and behavior of fourth grade children who were identified as being delinquency prone and retarded in reading.

Thirteen experimental Ss participated in a six-month pilot program, using programmed materials with the help of selected college tutors. The eleven control Ss were given only the tests mentioned next in this paragraph. Changes in behavior, adjustment, and reading achievement of both the experimental and control Ss were measured, in part, by data obtained from: The Sarason General Anxiety Scale; the Piers-Harris Self-Concept Scale; an adaptation of the Kvaraceus Delinquency Proneness Scale; the Gilmore Oral Reading Test; the Gates Advanced Primary Reading Tests, APR and AWR; and the Dolch Basic Sight Vocabulary. To provide further means for evaluating behavior change, teachers completed a behavior problems check list; an adaptation of the Kvaraceus Delinquency Proneness Check List; and two behavior rating scales, one by Sarason and one by Haring and Phillips. Classmates evaluated behavior change by completing two sociometric instruments. In addition to these measures, each experimental S, his parents, teacher, and tutor completed a questionnaire which called for reactions to the reading program.

If one is to rely only on the statistical analyses of the results from the tests, scales, and sociometric instruments which were used to measure changes in reading achievement, adjustment, and behavior, it could be concluded that the system which was developed to provide the tutors with remedial reading instruction and counseling skills was not an effective one. Statistical analyses of the data showed no significant differences between the experimental and control groups in amount of change in reading achievement, school behavior, social adjustment, self-concept, or anxiety. Although these findings indicated no advantages accruing to the fourth grade children who participated in the tutorial reading program, other evidence suggests that the program may have benefited the pupils. First, even though there were no significant differences between the experimental and control groups in the amount of change on any of the variables measured, the pattern of these changes favored the experimental group. In other words, more change scores for the experimental group were in the direction of improvement and greater than those of the control group. Secondly, the reactions of the children, parents, teachers, and tutors, obtained from the evaluation questionnaires, were all markedly affirmative for the tutorial instruction.

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Table 4.1

Summary of Changes for Reading Achievement, Adjustment, and Behavior Measures

Measure	Direction of Change*	
	Experimental	Controls
Gilmore Oral Reading Test (A)		
Accuracy	++	+
Comprehension	-	-
Reading Rate	++	+
Gates Advanced Primary Reading Tests		
APR	++	+
AWR	++	+
Dolch Basic Sight Vocabulary	++	+
Piers-Harris Self-Concept Scale	-	++
Sociometric - Program		
Social Expansiveness	-	++
Social Status	++	-
Sociometric - Party		
Social Expansiveness	++	+
Social Status	+	++
Behavior Traits	++	-
KD Proneness - JRTJFF	++	-
KD Pupil Check List	++	-
Teacher Rating Scale (Haring and Phillips)	++	+
Sarason Anxiety Scale	-	++
Teacher Rating Scale (Sarason)	-	-

* (++) Change score in the direction of improvement and greater than those for the group with which they are compared.

(+) Change score in the direction of improvement.

(-) Change score away from the direction of improvement.

Means and Standard Deviations of Pretest, Post-test, and Change Scores for the Experimental Group and the Control Group on Reading Achievement, Adjustment, and Behavior Measures; Means and Standard Deviations for the Experimental Group and the Control Group on Wechsler Intelligence Scale for Children Full Scale Scores

Measure	Pretest		Post-test		Change		
	Experimental	Control	Experimental	Control	Experimental	Control	Mean differences
Gilmore Oral Reading Test (A)							
Accuracy - Grade Equivalent							
Mean	2.36	2.74	3.14	3.32	0.78	0.58	0.20
Standard Deviation	1.01	1.08	1.01	1.07	0.81	0.88	
Comprehension - Grade Equivalent							
Mean	3.04	3.43	2.48	3.10	- 0.56	- 0.33	0.23
Standard Deviation	0.67	0.76	0.86	1.55	1.15	2.01	
Reading Rate - Words per minute							
Mean	68.23	86.64	89.08	100.73	20.85	14.09	6.76
Standard Deviation	26.66	29.16	28.80	31.76	17.26	22.63	
Gates Advanced Primary Reading Tests							
APR - Grade Equivalent							
Mean	3.53	3.84	4.27	4.40	0.74	0.56	0.18
Standard Deviation	0.87	0.62	0.94	0.81	0.57	0.79	
AWR - Grade Equivalent							
Mean	3.62	4.05	4.14	4.50	0.52	0.45	0.07
Standard Deviation	0.88	0.71	0.82	0.77	0.42	0.48	
Dolch Basic Sight Vocabulary							
Mean	76.92	88.45	86.69	92.72	9.77	4.27	5.50
Standard Deviation	22.92	15.15	20.95	8.68	12.21	8.00	

Continued on next page

Measure	Pretest		Post-test		Change		
	Experi- mental	Control	Experi- mental	Control	Experi- mental	Control	Mean dif- ferences
Piers-Harris Self-Concept Scale							
Mean	57.85	51.09	56.54	53.36	- 1.31	2.27	
Standard Deviation	11.28	12.78	12.74	14.12	17.23	14.95	3.58
Sociometrics							
Program - Social Expansiveness							
Mean	0.01	- 0.21	- 0.08	- 0.17	- 0.09	0.04	
Standard Deviation	0.36	0.45	0.33	0.52	0.33	0.39	0.13
Program - Social Status							
Mean	- 0.33	- 0.36	- 0.25	- 0.39	0.08	- 0.03	
Standard Deviation	0.45	0.36	0.48	0.37	0.37	0.29	0.11
Party - Social Expansiveness							
Mean	- 0.08	- 0.21	0.07	- 0.17	0.15	0.04	
Standard Deviation	0.36	0.32	0.45	0.45	0.28	0.34	0.11
Party - Social Status							
Mean	- 0.27	- 0.41	- 0.22	- 0.35	0.05	0.06	
Standard Deviation	0.41	0.31	0.41	0.36	0.28	0.19	0.01
Behavior Traits							
Mean	3.00	2.54	1.85	3.18	- 1.15	0.64	
Standard Deviation	3.56	3.64	2.38	3.63	1.86	2.91	1.79
KD Proneness - JRTJFF							
Mean	2.23	1.18	2.15	1.27	- 0.08	0.09	
Standard Deviation	9.40	5.29	6.57	5.62	10.49	7.80	0.17

Continued on next page

Measure	Pretest		Post-test		Change		
	Experimental	Control	Experimental	Control	Experimental	Control	Mean differences
KD Pupil Check List							
Mean	5.85	6.09	5.23	7.36	- 0.62	1.27	1.89
Standard Deviation	4.08	5.22	3.37	4.46	2.63	4.05	
Teacher Rating Scale (Haring and Phillips)							
Mean	107.69	106.55	114.15	108.55	6.46	2.00	4.46
Standard Deviation	30.00	27.04	26.44	25.76	15.03	22.35	
Sarason Anxiety Scale							
Mean	12.85	12.09	13.00	12.00	0.15	- 0.09	0.24
Standard Deviation	8.07	9.31	7.75	6.75	9.76	5.26	
Teacher Rating Scale							
Mean	68.38	67.91	67.00	62.09	- 1.38	- 5.82	4.44
Standard Deviation	7.49	6.24	8.05	6.77	6.70	8.09	
Wechsler Intelligence Scale							
Full Scale							
Mean	95.77	98.45					2.68
Standard Deviation	9.16	11.08					

Chapter 5

Summary and Conclusion

Children whose classroom behavior is persistently aggressive and disruptive are serious problems for their teachers, their peers, and themselves. Their behavior may often make it impossible for the teacher to carry out planned learning activities. Her failure with the class as well as with the aggressive-disruptive child may produce frustration and severe emotional reactions in the teacher. The aggressive-disruptive child's peers suffer in several ways: their learning of basic skills may be impaired; their social learning may be disrupted; and they may suffer considerable anxiety as a result of the aggressive classroom episodes.

Perhaps most serious of all are the immediate and long-range effects of his own behavior on the aggressive-disruptive child himself. He, too, will suffer the disadvantages which his peers suffer, but much more intensely. It seems likely that patterns of aggressive behavior, first revealed in school, may change in form and direction and manifest themselves later in delinquency and crime.

In *The Challenge of Crime in a Free Society*, the President's Commission on Law Enforcement and Administration of Justice (1967) recognized the serious problem of the aggressive-disruptive child's relationship with the school and suggested that the school may not only be unable to cope with the problem, but that the school is probably even augmenting it.

In *Juvenile Delinquency and Youth Crime*, the Task Force on Juvenile Delinquency (1967) specifically acknowledged the predictive relationship between persistent school misconduct and delinquency; but the Task Force also suggested that this is so in part because of the poor, ineffective ways schools handle children who misbehave.

Recent reviews of the research on delinquency and aggressive classroom behavior by Quay (1965), Kvaraceus (1966), Balow (1966), and the National Society for The Study of Education (1966) indicate that children who are persistently aggressive and disruptive in school are lower in intelligence, lower in basic scholastic achievements, and have more contacts with law enforcement agencies than children whose behavior is not aggressive and disruptive.

In Phases I and II of the Eau Claire County Youth Study, results were obtained which corroborated these findings and extended the observations to several other important areas in the lives of the youngsters and their parents (Thurston, Feldhusen, and Benning, 1964; Feldhusen, Thurston, and Benning, 1965).

In Phases I and II, all the third, sixth, and ninth grade teachers in Eau Claire County, Wisconsin, were asked to nominate children in their classes whose behavior was consistently aggressive and disruptive and children whose behavior was consistently socially acceptable and productive. There were 568 nominated as aggressive-disruptive and 982 as socially acceptable and productive. These teachers were also asked to check on a list of misbehaviors those which they had observed in each child nominated.

From each group of nominees, 192 were drawn randomly - but with equal representation by sex, grade, and home location as urban or rural - for intensive study. Trained social workers and psychologists interviewed the 384 youngsters and their parents. Also, a battery of tests was administered to the youngsters.

These interviews and tests revealed that the aggressive-disruptive youngsters, as compared with youngsters whose behavior was consistently socially acceptable, were much more delinquency prone; their parents were less effective in supervising, disciplining, in providing affection, and in maintaining family cohesiveness; their intelligence and school achievements as reflected in teacher grades and standardized tests were much lower; their parents were far lower in levels of education and occupation; and their parents responded to many aspects of the community, neighborhood, and school in more negative ways.

Longitudinal Study

Five years after the original study was completed, further information was gathered on all 1550 of the original nominees concerning their school achievements, their social adjustment, their classroom behavior if they were still in school, and their contacts with law enforcement agencies. Specifically answers were sought for the following questions: five years after their original nomination as aggressive-disruptive or socially approved, are there significant differences between these groups of youngsters in basic achievements, social adjustment, classroom behavior, and in contacts with the law? How are the differences, if any, related to sex, grade level, and home location? Are there significant differences in school achievement, social adjustment, classroom behavior, and in contact with the law between children who had been found to be high in delinquency proneness and children who were low according to the Glueck Scale and the Kvaraceus Delinquency (KD) Proneness Scale?

For the original third and sixth graders, now in eighth and eleventh grades, teacher grades were obtained for English, science, mathematics, and social studies and STEP scores for reading, writing, social studies, science, and mathematics. For the original ninth graders, now out of school, rank in graduating class was obtained. A behavior trait rating form was completed by current teachers of the eighth and eleventh graders. Social adjustment ratings on nine aspects of behavior by current teachers were available from school records for eighth and eleventh graders. Police and sheriff departments supplied data concerning frequency of recorded contacts for all youngsters in the original study.

In general, a four-way anova was used - behavior, grade, home location, and sex - in analyzing the data. The samples used in different parts of the study ranged from a low of 64 to a high of 384. For most of the analyses, two samples and two complete analyses were run, the second as a cross-validation of the first analysis. The 384 children who had been studied intensively in Phases I and II and for whom longitudinal data were obtained, served as one source of sample for the longitudinal analyses. The 1166 children who had been nominated but not studied intensively in Phases I and II, but for whom longitudinal data were obtained, became a second source of sample. Thus, two samples were drawn from these two pools of Ss for each analysis.

The samples for the analyses of high and low scorers on the Glueck scale and KD scale were drawn from the 384 children who were studied intensively in 1961-62 and 1962-63. High scorers were delinquency prone. These analyses were all two-way for delinquency proneness by sex.

The analyses of teacher grades and STEP scores were all run with IQ as a covariate. The results from these achievement measures yielded

F ratios for the main effect of behavior, which were, without exception, significant at the .01 level. The same results were also obtained for the rank in graduating class (the raw rank scores had been normalized by conversion to arcsin equivalents) of original ninth graders who were now out of school. In all cases the mean achievements of the aggressive-disruptive children were lower.

On all nine of the social adjustment ratings, the F ratios for behavior were significant at the .01 level, and all the means for aggressive-disruptive children were lower than the means for their socially acceptable peers.

In the analyses of current classroom behavior of the eighth and eleventh graders, significantly more instances of aggressive behaviors were reported by teachers for the aggressive-disruptive youngsters than for those who were nominated as consistently displaying approved behavior.

Contacts with police and sheriff departments were tabulated in terms of a single contact and two or more contacts with the police, with the sheriff, and with both agencies combined. Regardless of the method of tabulation, the aggressive-disruptive youngsters had more frequent contacts with the law.

The results for the analyses of delinquency proneness indicated that children who were highly delinquency prone, according to the Glueck scales, were lower in school achievement as reflected in STEP scores and teacher grades, social adjustment as reflected in teacher ratings, and had more frequent contacts with law enforcement agencies than children who were low in delinquency proneness. The results for the KD scales were less consistent. Children who were high in delinquency proneness, as compared with those who were low, had lower ranks in their graduating classes, were rated lower on several of the adjustment scales, but did not differ in number of contacts with law enforcement agencies.

The results then suggest that early, consistent, aggressive-disruptive behavior in school is associated with a host of concurrent difficulties for the child in school and at home; and it is predictive of comparatively low achievements in school, low social adjustment ratings, continuing higher frequency of aggressive-disruptive behavior in the classroom, and more frequent contacts with law enforcement agencies.

The problem seems immense. The Task Force on Juvenile Delinquency (1967) suggests that the school, far from being a potential source of alleviation of the delinquency prone youngster's problems, joins with the neighborhood and family in becoming a contributor to the youngster's progressive behavioral deterioration. Irrelevant instruction, inappropriate teaching methods, bad grouping practices, and poor remedial instruction are some of the general ways, suggested by the Task Force, in which the school augments the problem. With reference to specific reactions to the deviant child by the school, the Task Force indicts the school for persistently placing blame on the deviant youngster, for engaging in too much labelling of deviancy, and for finally coming to accept and to compromise with the deviant youth's bad behavior (p. 234-257).

In short, the awareness by the teacher of the child's disapproved behavior may not be used constructively but rather may be used as a basis for a self-fulfilling prophecy. The teacher's concept of the child as disapproved may come to be shared by the child himself. Without active constructive intervention into the developing negative self-concept, the child may come increasingly to think of himself as an unworthy person, disapproved and disliked by others. With such a view of self, and without massive efforts aimed at its alteration, it seems logical to assume that the child will often live up to his "advance billing." The disapproval of the teacher, the poor self-concept of the child, and the absence of means to gain approval in the school, all constitute bases for a downward spiralling level of adjustment which eventuates in underachievement, school dropout, juvenile delinquency, and adult crime.

The Remedial Reading-Preventive Study

Massive efforts will be needed to help the teacher, the school, and the community to learn how to help potentially deviant, aggressive-disruptive youngsters learn how to live in productive, socially acceptable ways. One exploratory effort in this research, aimed at offsetting these unfavorable developments, was the introduction of remedial reading to youngsters manifesting both reading difficulties and persistent classroom misbehavior. Among other things, the findings of this research illustrate the difficulties of introducing constructive change, even with youngsters at a relatively early stage of their school experience.

The research problem involved a study of the effects of a tutored remedial reading program on the social adjustment, self-concept, anxiety level and reading achievement of fourth graders who were disruptive and aggressive in the classroom, who were retarded in reading, and who were of at least average intelligence. Thirteen experimental Ss participated in a six-month pilot program using programmed materials with the help of selected college tutors. Eleven control Ss were given only the tests.

Changes in behavior, adjustment, and reading achievement of both the experimental and control Ss were measured in part by data obtained from: the Sarason General Anxiety Scale; the Piers-Harris Self-Concept Scale; an adaptation of the Kvaraceus Delinquency Proneness Scale; the Gilmore Oral Reading Test; the Gates Advanced Primary Reading Tests, APR and AWR; and the Dolch Basic Sight Vocabulary. To provide further means for evaluating behavior change, teachers completed a behavior problems check list; an adaptation of the Kvaraceus Delinquency Proneness Check List; and two behavior rating scales. Classmates evaluated behavior change by completing two sociometric instruments. In addition to these measures, each experimental S, his parents, teacher, and tutor completed a questionnaire which called for reactions to the reading program.

Statistical analysis of the data showed no significant differences between experimental and control groups in amount of change in reading achievement, school behavior, social adjustment, self-concept, or anxiety. Although these measures indicated no advantages accruing to the fourth graders who participated in the tutorial program, the reactions of the children, parents, teachers, and tutors obtained from the evaluation questionnaire were all markedly affirmative for the tutorial instruction.

Conclusions

The results of this research indicate that schools, teachers, and related community social agencies are faced with a complex set of problems to deal with in relation to the child who first reveals persistent aggressive-disruptive behavior in school. The role of the teacher in first identifying these aggressive children should be formalized. The teacher can identify aggressive-disruptive children, and he can pinpoint the specific behaviors exhibited by the child.

Since the aggressive child will probably experience difficulty in learning, the teachers, guidance personnel, and remedial instructors should join forces and plan methods to offset the underachievement spiral which will otherwise engulf the aggressive child.

The aggressive child will be handicapped in a number of aspects of personal and social adjustment. To alleviate these problems, the guidance counselling staff should work with the school social worker to become aware of difficulties in the home and neighborhood. Results from the analyses with the Glueck scales indicate that the aggressive-disruptive youngster may have a family which is inadequate in providing supervision, affection, discipline, and cohesiveness. These handicaps may require intensive work with the parents. To the degree that this work is successful, there is a likelihood that the child's personal and social adjustment will be improved.

Personal and social adjustment problems may also grow in the classroom. Hence, teachers need assistance from counselors and social workers to understand the background problems of the aggressive-disruptive child and to find methods of working with the child to alleviate the problems.

The aggressive child persists in displaying aggressive behavior in the classroom over a period of years. If such behavior is sufficiently serious, it may be necessary to protect the teacher and other children from the disturbing and disruptive behavior of the aggressive child or to instruct the teacher in special techniques for dealing with acute aggressive behavior.

The results of this research also indicate a higher tendency for aggressive-disruptive children to drop out of school. Efforts by schools during the last decade to prevent youngsters from dropping out, indicate that massive efforts, often times involving substantial curricular revisions or innovations, will be needed. This, then, is a problem for the entire school staff and the community. The community will certainly be involved if curricular innovation means increased financial support.

The aggressive child will also have more frequent contacts with law enforcement agencies. The school and the family should have close personal contact with these agencies in order to learn more about the kinds of behavior displayed by the aggressive-disruptive child in his delinquent activities. It also seems possible that personnel of law enforcement agencies could be enlisted in the effort to help aggressive youngsters by providing them with information about the youngster, his problems, his plight in school, and his home situation. As yet much law enforcement is essentially harsh and punitive; but there seems to be a substantial demand throughout the United States for law enforcement agents to become more sympathetic and understanding of the problems of deviant individuals, especially children.

There is a great need now for experimental efforts to find new techniques and methods for working with aggressive-disruptive youngsters to alleviate their problems and prevent delinquency. Research on methods for alleviating delinquency are often hampered by extreme bias and emotionality of the researchers. Some new methods are thought to be panaceas. Others are held as matters of blind faith, even in the light of contradictory evidence. Objective, well planned, dispassionate evaluative research is needed.

There is also a need for integration of research evidence with theoretical concepts to provide better and broader understanding of aggressive-disruptive-delinquent behavior. Much of the research and field trials on delinquency prevention or remediation lack the rationale or guiding concepts to make the results meaningful and useable.

Finally, there is an intense need for dedicated and concerted efforts of researchers who will devote themselves wholeheartedly and over a long period of time to the problems of aggressive-disruptive youth. Much research in this area is short-lived and academic. Aggression and delinquency researchers face problems which demand sustained devotion.

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Appendix A

EAU CLAIRE COUNTY YOUTH STUDY
BEHAVIOR RATING FORM

	Name	Negative Characteristics
AG Name of Girl Whose Behavior is Most Approved		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
AB Name of Boy Whose Behavior is Most Approved		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
AG Name of Girl Whose Behavior is 2nd Most Approved		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
AB Name of Boy Whose Behavior is 2nd Most Approved		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

LIST OF NEGATIVE CHARACTERISTICS (BEHAVIOR PROBLEMS CHECK LIST)

RECTIONS: Circle the numbers after each name for the characteristics which are und consistently or frequently in the behavior of each of the eight students.

1. quarrelsome
2. sullen
3. rude
4. defiant
5. resentful
6. steals
7. lies
8. destructive
9. disrupts class
10. is a bully
11. has temper tantrums
12. overly dominant
13. talks back
14. cruel
15. tardy or absent without excuse
16. profanity or obscenity
17. fights with other pupils
18. deceptive

DG Name of Girl Whose Behavior is 2nd Most Disapproved		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
DB Name of Boy Whose Behavior is 2nd Most Disapproved		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
DG Name of Girl Whose Behavior is Most Disapproved		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
DB Name of Boy Whose Behavior is Most Disapproved		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Appendix B

TO THE TEACHER: We would appreciate your providing intelligence test information and reading achievement test information for each of the pupils listed on the nomination sheet. Test information may not be available in all of the forms listed under "Results," but fill in each blank for which information is at hand.

Thank you for your assistance in this project.

PUPIL'S NAME ....Birth date ....
month day year

Intelligence Test Information

Name of most recent intelligence test. . . . . Form . . . . .

Date of the test . . . .

Results: IQ . . . .

M.A. . . . .

Percentile . . . .

Reading Achievement Information

Name of most recent
reading achievement test . . . . Form . . . . .

Date of the test . . . .

Results: Grade Equivalent. . . . .

Stanine . . . .

Percentile . . . .

If the achievement test has more than 1 reading sub-test, e.g., word meaning, paragraph meaning, report the score on each part. If there is a composite reading score, please report that also. Identify each sub-test score.

Appendix C

Letter to Parents

Mr. and Mrs. ________________
____
____

Dear Mr. and Mrs. ____________:

We are seeking your cooperation in a Youth Study in Eau Claire County. This is part of a continuing project involving young people which was begun in 1961. Several hundred children in our county have already been involved in this study.

Mr. Homer DeLong, Superintendent of Public Schools; Father John Rossiter, Principal, Regis High School; as well as other school administrators in the county have given their full endorsement to this Youth Study.

As part of this youth project we will be seeing third and fourth graders from various county schools. During the next few weeks we plan to interview children individually. At this time each child will be given some brief tests, including those involving reading and ability. All this information will be kept confidential and used only for the purposes of this study. It is only through information such as this that we can learn more about today's youngsters.

We would like very much to have your (son/daughter), __________, participate in this. We believe that he will find it interesting.

In the near future, Mr. Kenneth McRoberts, a representative of the study, bearing a letter of identification, will call on you to learn your pleasure in this matter. This will afford an opportunity for you to ask any questions you may have.

We hope we can look forward to your participation.

Very truly,

John R. Thurston, Ph.D.
Project Director

EAU CLAIRE COUNTY YOUTH STUDY

Appendix C

Letter to Parents

Mr. and Mrs.____________
____
____

Dear Mr. and Mrs. ___________:

This letter is to keep you informed of the progress of the Eau Claire County Youth Study and to ask your continued cooperation in it during this school year. But first of all, let us take this opportunity to thank you for your willingness to participate in the work thus far. Without the assistance of people such as you, the study could not exist. We hope that your (son/ daughter) enjoyed meeting with Mr. Gilbride and that it was an interesting day for (him/her).

During the summer we completed the interviews with the children we have planned to include in a program of reading improvement this fall and coming spring. In brief, we are interested in finding out how much individualized help with some special reading materials can benefit a child's reading ability and activities in school. This program will be under the supervision of the staff of the study. The individual help in reading will be carried out at the school by university students who were selected and especially trained for this work. A child will meet with his "tutor" two or three times a week, for a period of approximately six months. The college student is thus available on a regular basis to guide the child's progress through a series of reading books which are particularly suitable for working with one child at a time.

In a few days, Mr. Kenneth McRoberts of the project staff, will get in touch with you to learn if _________will continue to be in the Youth Study in the reading improvement program. We feel that it should be of real value to him as well as being a very interesting experience. When Mr. McRoberts contacts you, you will be able to learn more about the program should you have any questions.

Again, our sincere thanks for your part in making this study of children possible.

Sincerely yours,

John R. Thurston, Ph.D.
Project Director

James J. Benning, Ed.D.
Co-Director

Appendix D

Tutor-Counselor Application*

Name ____________________ Date ____________________

Year in College ____________ Age ____________________

Professional Education ________ Liberal Arts ____________

Major: ______________________

Minor: ______________________

Work Experience: (Indicate particularly the time spent in working with children, e.g., teaching, camp counselor, playground, etc.)

____

____

____

____

What personal qualities do you possess which contribute to your ability to work with children?

____

____

____

____

Professional Plans:

____

____

____

____

---

* Attach a copy of your college transcript.

Appendix E

Sociometrics - Party

INSTRUCTIONS TO TEACHER

If our class were going to have a party, many things would have to be done first. One of the things would be to plan the games we would play at the party. If I asked you to choose some of your classmates to work with you in deciding on the games for the party, whom would you choose to help you pick out the games that would be the most fun? In the places below, tell how you feel about having each of the members of the class help pick out the games for our party. Follow the special directions very carefully after I read them to you.

Appendix E

Sociometrics - Party (Continued)

DIRECTIONS:

1. If you would choose a classmate to help you pick out the games, circle the word "Yes" after his or her name.
2. If you would not choose a classmate to help you pick out the games, circle the word "No" after his or her name.
3. If you cannot decide if you would choose a classmate to help you pick out the games, circle "?" after his or her name.
4. If you wish you may write the reason for your choices after the names.
5. After you have done this, go back and make a checkmark (✓) in front of the names of those classmates whom you would most like to have help you pick out the games for the party.

   Be sure that you circle one of the answers after the name of every one of the pupils in our class. You will not make a circle after your own name, of course.

   Write your name at the bottom of the list in the place provided.

NAME	IN YOUR GROUP			REASONS
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	

Appendix E

Sociometrics - Program

INSTRUCTIONS TO TEACHER

If I asked you to choose some of your classmates to work with you on a program which would be given before a class of younger pupils in our school, whom would you pick to work with you? To get your program ready you and your classmates would need to do quite a bit of reading and writing. In the places below, tell how you feel about working on such a program with each of the members of our class. Follow the special directions very carefully after I read them to you.

Appendix E

Sociometrics - Program (Continued)

DIRECTIONS:

1. If you would choose a classmate to work with you, circle the word "Yes" after his or her name.
2. If you would not choose a classmate to work with you, circle the word "No" after his or her name.
3. If you cannot decide if you would choose a classmate to work with you, circle "?" after his or her name.
4. If you wish to, you may write the reason for your choices after the names.
5. After you have done this, go back and make a checkmark (✓) in front of the names of those classmates with whom you would most like to work.
   Be sure that you circle one of the answers after the name of every one of the students in our class. You will not make a circle after your own name, of course.
   Write your name at the bottom of the list in the place provided.

NAME	IN YOUR GROUP			REASONS
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	
	Yes	No	?	

Appendix F

TUTORED READING EVALUATION

CHILD Child's Name______________________________

1. Have you become a better reader?

2. Do you like to read more?

3. Do you read outside of school more often now?

4. Are you doing better in other subjects?

5. Did the special reading classes help you?

6. Were the special classes interesting?

7. Did the storybooks help you?

8. What did you like best about the special reading classes? the reading books?

9. What did you like least about the special reading classes? the reading books?

10. Did the tutor help you learn?

11. How did the tutor help? Tell me three things about the tutor.

12. Is twice a week often enough to meet with the tutor?

13. Was the room a good one for your special reading classes?

14. Do you like school better or less well since last fall?

Tutored Reading Evaluation - Child (Continued)

15. Has there been any change in the way your classmates act toward you since last fall?

16. Have you changed the way you act at school and at home since last fall?

17. What is the most important thing a grown-up can do to help you to learn to read better?

18. Are you as good a reader as most other kids in your class? Not as good? Better?

19. Do you want to learn to be a still better reader?

20. Will you be able to learn to read better?

21. What reading group are you in?

22. What group do you want to be in?

23. Is reading important? Why?

24. How would you teach somebody to read?

Appendix F

TUTORED READING EVALUATION

PARENT Child's Name ____________________________

1. Has your child ____________ improved in reading?

2. Does he like to read more?

3. Does he read outside of school more often now?

4. Is he doing better in other subjects?

5. Did the special reading classes help him?

6. Did he find the special reading classes interesting?

7. Did the storybooks help him?

8. What did he like best about the special reading classes? the reading books?

9. What did he like least about the special reading classes? the reading books?

10. Did the tutor help him learn?

11. How did the tutor help him learn?

12. Is twice a week often enough to meet with the tutor?

13. Did your child mention anything about the room in which he met for the special reading program?

Tutored Reading Evaluation - Parent (Continued)

14. Do you feel he likes school better or less well since last fall?

15. Has there been any change in the way his classmates act toward him since last fall?

16. Has your child's behavior around home changed during this year?

17. What is the most important thing you can do to help your child to learn to read better?

18. Were there any particular problems created for you by this program?

19. What are some things the child has told you about the program?

20. Do you have any other observations and suggestions you would like to offer?

Appendix F

TUTORED READING EVALUATION

TEACHER Child's Name ____________________________

1. Has the child improved in reading?
2. Does he like to read more?
3. Does he read outside of school more often now?
4. Is he doing better in other subjects?
5. Did the special reading classes help him?
6. Were the special classes interesting?
7. Did the storybooks help him?
8. What did he like best about the special reading classes? the reading books?
9. What did he like least about the special reading classes? the reading books?
10. Did the tutor help him learn?
11. How did the tutor help him learn?
12. Is twice a week often enough to meet with the tutor?
13. Was the room suitable for the special reading classes?
14. Do you feel he likes school better or less well since last fall?

Tutored Reading Evaluation - Teacher (Continued)

15. Has there been any change in the way his classmates act toward him since last fall?

16. Has the child's classroom behavior changed during this year?

17. What is the most important thing you can do to help a child learn to read better?

18. Were there any particular problems created for you by this program?

    Was the class disrupted by the departure or return of the child?

19. What reading group was the child in last October?

    What group is he in now?

20. Does he want to learn to read better?

21. Do you have any other observations or suggestions you would like to offer?

Appendix F

TUTORED READING EVALUATION

TUTOR Child's Name ______________________

1. Has the child improved in reading?
2. Does he like to read more?
3. Does he read outside of school more often now?
4. Is he doing better in other subjects?
5. Did the special reading classes help him?
6. Were the special classes interesting?
7. Did the storybooks help him?
8. What did he like best about the special reading classes? the reading books?
9. What did he like least about the special reading classes? the reading books?
10. Do you feel you were able to help him learn?
11. What would you say were the main ways you were able to help him learn?
12. Is twice a week often enough for these special reading classes?
13. Was the room suitable for these special reading classes?
14. Do you feel he likes school better or less well since last fall?

Tutored Reading Evaluation - Tutor (Continued)

15. Has there been any change in the way his classmates act toward him since last fall?

16. Has the child's behavior in the special reading classes changed during this year? List the ways other than in reading ability.

17. What is the most important thing you can do to help a child learn to read better?

18. What are some of the main problems with child, teacher, or parents which you encountered.

19. Did you get to know

    a. the child?

    b. the parents?

    c. the teacher?

20. Were you trained adequately?

21. Were you supervised adequately?

22. Are there any other observations or suggestions you would like to offer?